REPORT ON THE

# NEAR EAST-SOUTH ASIA
# REGIONAL EXTENSION SEMINAR

JERUSALEM, JORDAN
MARCH 18-31, 1962

HOST

## HASHEMITE KINGDOM OF JORDAN
## RURAL DEVELOPMENT DEPARTMENT
## MINISTRY OF AGRICULTURE

SPONSOR

AGENCY FOR INTERNATIONAL DEVELOPMENT, UNITED STATES OF AMERICA

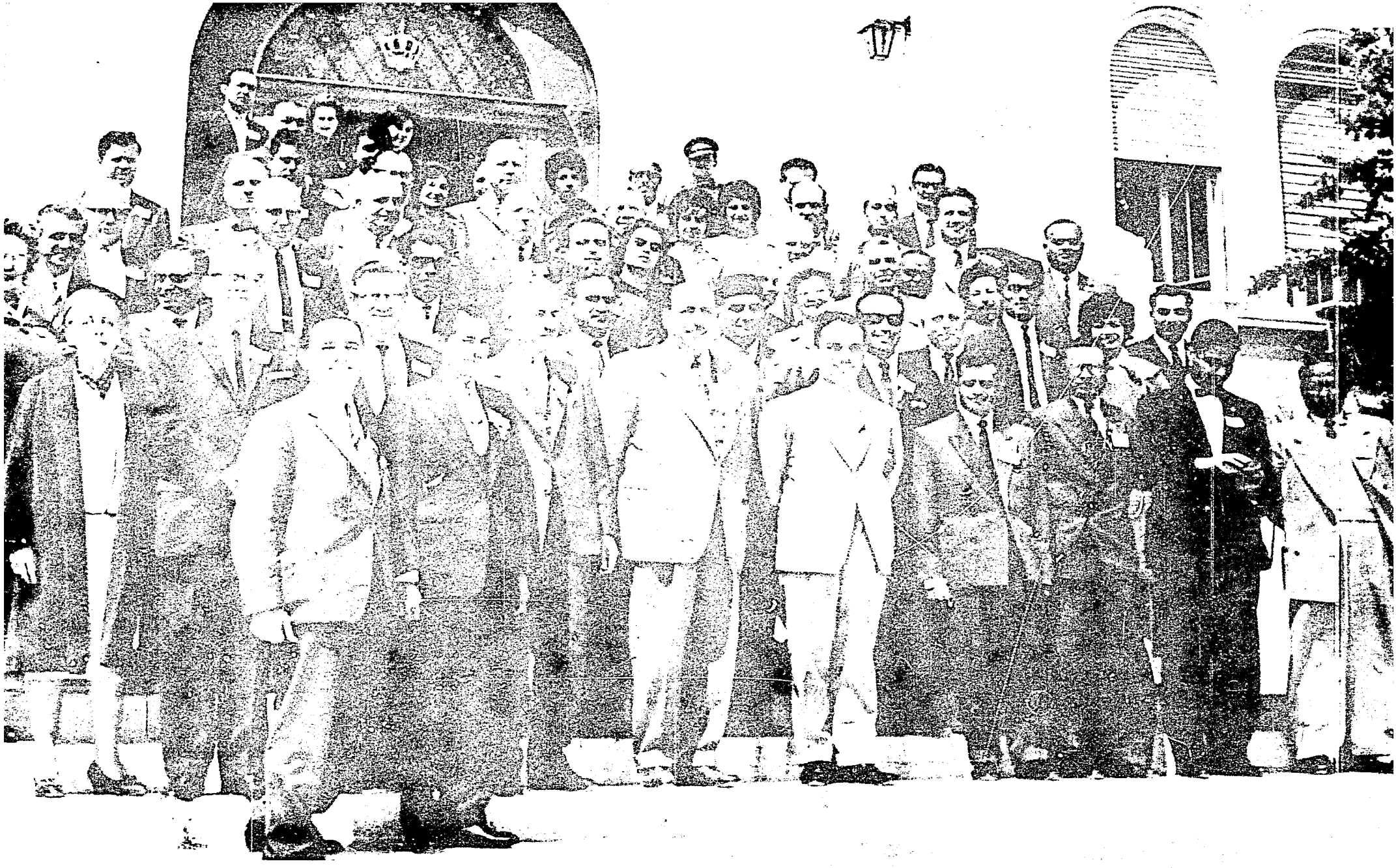
## FOREWORD

The Fourth Near East-South Asia Regional Agricultural Extension Seminar followed similar meetings sponsored in recent years by the Agency for International Development or its predecessor agencies in Lebanon, Iran and India.

The objective of the seminar was to provide an opportunity for the delegates from the NESA Region to exchange ideas and study means of increasing the effectiveness of Agricultural Extension Work in their respective countries.

This report is a record of the seminar. While not a detailed transcript of the proceedings, it contains many of the highlights of the sessions and gives expression to much of the thinking developed in the group discussions. It is hoped that its contents will provide ideas for Extension Workers and prove useful in planning similar seminars in the future.

The Agency for International Development acknowledges with thanks the great contribution to the success of this seminar, held under the patronage of His Majesty, King Hussein, which was made by the host, the Rural Development Department, Ministry of Agriculture, Hashemite Kingdom of Jordan.



More than seventy persons participated in the Near East-South Asia Regional Extension Seminar. Above photo shows group at Basman Palace following reception by His Majesty King Hussein, who posed for picture with the delegates.

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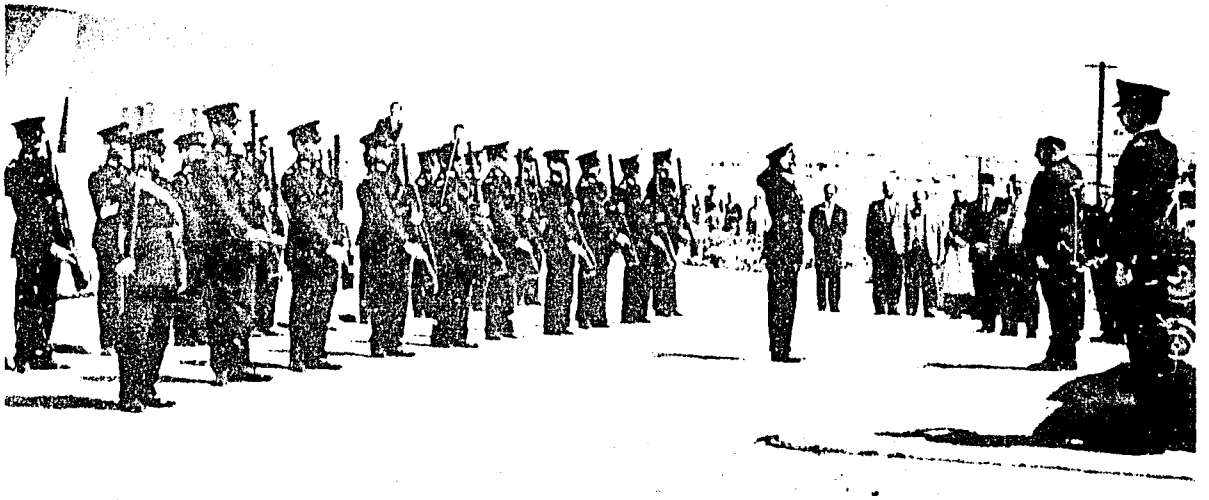
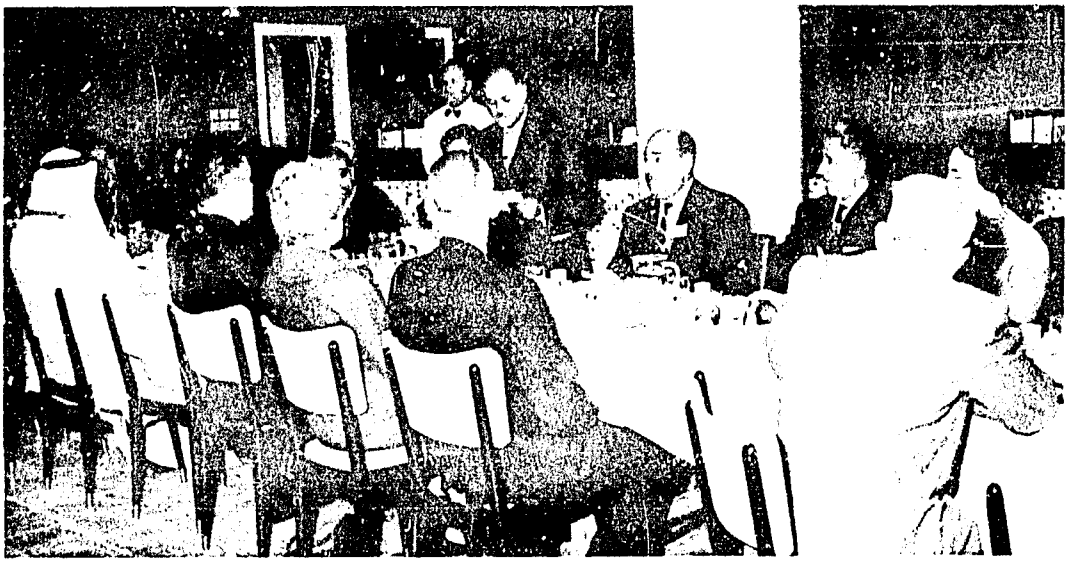
# OPENING DAY AT THE SEMINAR



Dr. Qassem Rimawi, Representing King Hussein, arrives at Seminar.

First General Session gets underway in Carlton Hotel, (right)
Dr. Amin Majaj, Acting Mayor of Jerusalem, adresses opening day Luncheon, (below)



## ROYAL WELCOME OF HIS MAJESTY, KING HUSSEIN

Delivered by His Excellency, Dr. Qassem Rimawi,
Minister of Agriculture

Brothers and Sisters,
Respective Delegates of the Participating Countries,
Ladies and Gentlemen:

I am happy to have the opportunity to extend to all of you the greetings of My Master, His Majesty King Hussein the Great, and his thanks to each and every one of you for bearing the hardships of travel to attend this seminar. It gives me great pleasure and honor to inaugurate this Seminar of Agricultural Extension in the name of His Majesty the King of the Hashemite Kingdom of Jordan, and to convey to you the most hearty welcome on behalf of His Majesty, hoping that you will have a good stay in Jordan and trusting that your honorable mission will be most successful and that you will attain your objectives.

I welcome you again and want you to feel at home in Jordan

May Peace be upon you.

# OPENING DAY SPEAKERS

Khalid Haj Hassan, Chairman.

His Excellency, Dr. Qassem Rimawi

Dr. R. W. Shoffner

Dr. E. T. York.

## OPENING ADDRESS

His Excellency, Dr. Qassem Rimawi,
Minister of Agriculture, Hashemite Kingdom of Jordan

Respective delegates of the participating countries, ladies and gentlemen:

Prior to anything else, I wish to express to you, on behalf of the Government of Jordan, our gratitude and thanks for the keen interest displayed by you in participating in this Regional Seminar. The efforts of the Agency for International Development, the sponsor, are highly appreciated. We, as the host country, view this seminar, the first of its kind in the Arab World, as an honor and privilege. May I seize this opportunity to extend to you the most hearty welcome of our Government as well as the one and a quarter million farmers of this country which form seventy-five per cent of the people of Jordan.

It is a unique occasion to have such a group of representatives, both official and non official, member delegates and observers of a dozen nations to meet together to discuss common problems of agricultural development. The timing of the seminar, the place, and the participants, are all encouraging and will add to its success. I hope and trust that the days of work and deliberations will culminate in fruitful results, that are meaningful to all our countries. It is a good coincidence to have this seminar at the same day of St. Joseph's Holiday as well as at the month of Easter. Let us pray, therefore, that we all see the world guided by equity, love and righteousness that we all are trying to maintain.

This seminar is being held in Jerusalem, the Holy City. No other city can stir the hearts of good people more than this city does. It is with this city that practically all of us have special spiritual relations characterized by enormous admiration. This city stands in our history of religion as an everlasting and twinkling symbol - - - a symbol of faith in God. Human society does not need more than resorting to these same ideals in this atomic age dominated by race of armament. If the human race is to continue to exist, it is only through this media that the peoples of the world can avoid the unfavourable consequences of the cultural lag caused by the disparity of development between science and moral values. We in this country, inspired by all these meanings, have full determination to live to these democratic values, at any cost, under the courageous leadership of our great leader King Hussein.

Turning now to the question of development in general, I want to make it clear that development works are a necessity for all nations of the world regardless of their degree of development. All nations of the world must cooperate to promote these processes of development. The need for this cooperation should not be voiced at a lower tone in the so called highly developed countries than in the so called under developed countries for the sake of peace and prosperity of all nations. We in this part of

the world look forward to learning from the more technically advanced countries their skills and "know how" aiming at large to avoid, as much as possible, the repetition of their mistakes and thus be able to accelerate the rate of development of our country.

It is for this same purpose that we are here today. We, in this country, are fully aware of the wide gap that exists between our level of aspiration and our level of achievement. That is why our Government has adopted the Five Years Program as part of this general policy for planning. We need to know how can we bridge that gap or make it narrower. Who is to do it? Where is the starting point? Can we do it haphazardly, or do we need a set plan? Can any person do it or it must be handled by well trained professionals? Do we have the right number of professionals needed, and how can we supply the number needed for development? Shall we start from up, or from the grass roots? Can any program be meaningful without starting with rural people? Shall we work with the people or for them? These are some of the questions I wanted to raise and am sure that a good number of them will be answered by this seminar.

It is on these points and others that we need to exchange views, aiming to find the ways and means to solve our fundamental problems, one of the main of which is the disparity of the rate of increase of the population on one hand and the increase of production on the other hand.

Our country is faced with an increase in population at a fast rate and poverty and hunger in rural areas are staring us in the face.

To achieve progress towards solving this very major existing problem, the first thing to do is to raise agriculture out of its backward conditions. In other words we have to help in modernizing and equipping our agriculture with every kind of new technique. To achieve this objective our target must be focused on the rural people. The rural people have to be carefully educated to use the modern methods and techniques which help them to be more productive and efficient, as well as try to answer their questions and to help them to help themselves, thus we might be able to help solve the problems that stand in the way of their progress.

In the free nations of the world, the rural people and the resources at their command are fundamental assets. Only when rural people and their resources are developed can nations themselves achieve development. Throughout most of the countries of the world, the development of rural people, the improvement of the farm and home, has been most effectively promoted through some form of rural extension program. So widespread, indeed, has been the acceptance of Extension that it is now one of the largest adult education systems in the world.

From country to country, however, the stage of development of the extension services varies. In some countries an extension program, organized on both national and local level, has been achieved. In other countries extension work is being carried on by groups with little or no formal organization.

But no matter how much the stage of development of an extension program may differ from country to country due to differences in cultural patterns, social standings, and financial situations, the task of advising people on how to wrest a better living from the soil, remains the same, and that task is the task of rural extension. The task of rural extension as distinct from classroom education is to help rural families apply science to the day-to-day routing of farming, home-making and other aspects of rural living. At the same time it will sponsor an integral part of the nation's social wealth and rural welfare. In addition rural exten-

sion has an important international aspect in that it can establish a better understanding between the rural societies of the various countries, societies which still constitute the majority of the world's population. It can thus establish a firm basis for international cooperation, and solid foundation, for the peace and prosperity of all nations.

I am here to emphasize that the objectives of this conference are to us local objectives and aims and that we expect many problems to be solved to our benefit and the benefit of all countries represented here and elsewhere in the world. We consider the presence of such a distinguished group of experts and technicians, of experienced men and women to include all the experiences of the concerned regions, and be an outstanding asset for agricultural extension at large.

May I assure you that extension work in these countries of the East calls for more professional skills. It is true that the role of the Medical Doctor, the Politician, the Military Officer, the Teacher is evident. It is also equally true that the role of the Extension Worker is no less important. This is what actually and firmly is established in the experience of the long time developed countries. We have every reason that the extension worker can play a greater role in the newly developing countries such as the Far and Middle East countries than he did in the more developed countries, because it is going here on foot with social reform and can orient it. Let us all look forward to seeing extension work fulfilling its promise in the Far and Middle East countries.

Last but not least I am here to kindly ask you all to consider yourselves at home and I assure you that the Government of Jordan looks on you as her special guests and hereby offers you all possible facilities that would enable you to attain your objectives and respectful aims.

I welcome you again to Jordan and wish you all success in your seminar.

# DELEGATES RESPOND TO WELCOME, EXPRESS APPRECIATION OF PARTICIPATING COUNTRIES

Mr. Mohammad Ghufran,
Afghanistan.

Mrs. Suheyla Teoman,
Turkey.

Dr. Abdul Aziz Khan,
Pakistan.

Mr. Akrur N. Rana,
Nepal.

Mr. M. G. Kamath,
India.

Mr. Wajeh Maalouf,
Lebanon.

Mr. Athanassios Papaioannos,
Greece.

# EXTENSION'S CONTRIBUTION TO AGRICULTURAL DEVELOPMENT AND ECONOMIC GROWTH

Address by Dr. E. T. York, Jr.,
Administrator, Federal Extension Service
U.S. Department of Agriculture, Washington, D.C.

It is indeed a privilege to share this program with His Excellency, The Minister of Agriculture, Dr. Qassem Rimawi.

I bring warm greetings from the United States to His Majesty, King Hussein, to the people of Jordan and to those of you attending this conference. His Majesty, King Hussein, is held in high esteem in my country as a strong and courageous leader. My people also cherish a close bond of friendship with the people of Jordan--and indeed with the people of all the nations represented at this conference.

The planning committee for this meeting asked that I discuss some of the contributions by Extension to agricultural development and economic growth in the United States. We are honored that our efforts in extension education are of interest to this group of distinguished agricultural leaders. We consider it a compliment that you would ask us to share some of these experiences with you.

Agriculture is the basic industry of essentially every nation. Agricultural development is usually the forerunner to the development of other segments of a nation's economy.

Agriculture's first objective is to meet man's most basic need--the need for food to sustain human life. In earlier, more primitive societies, everyone was directly concerned with meeting food needs--by fishing, hunting, and gathering wild berries, fruits and nuts.

After man began to domesticate animals and cultivate crops, he developed the ability to produce more food than he and his immediate family needed. Consequently he was able to sell or barter a portion of his production.

As farmers became more productive, less and less manpower was needed in agriculture, freeing people for other occupations. These people in turn produced other goods and services which farmers could buy from the sale of foods to those no longer producing their own. Thus increased productivity and efficiency in agriculture has provided the very foundation for economic growth in our society.

There are many necessary factors to bring about agricultural development and stimulate economic growth. Perhaps of greatest importance are the development and application of new and improved technology. Research is needed to find new and better ways in producing and distributing food and fiber. Education is required to put these findings into practice.

We in the United States have combined research and extension education in a unique partnership. Before examining how this partnership operates--and its contributions to economic growth--let's look at the setting in which it was created.

In discussing the history and organization of the Extension Service in the U. S., it should be recognized that our organization has developed under conditions unique to the United States and that our operating structure may have little application in other countries.

We do believe, however, that in the United States extension work is based on some basic principles and philosophical considerations that might be applied broadly. So, after reviewing how extension developed in the U.S., we will consider some of the experiences of a half century of extension work in America.

## Historical Background

This year my country is observing two significant centennial anniversaries. In 1862, both the Land-Grant Universities and the U. S. Department of Agriculture were founded. In the 100 years that have elapsed since their founding, these institutions have made an enormous impact on the lives of all Americans.

The legislation creating the Land-Grant Universities provided land and money to establish in each State an educational institution "to teach . . . agriculture and mechanic arts . . . (and) to promote the liberal and practical education of the industrial classes . . ."

This was a completely new educational concept. In setting up this system of university education for the masses, two educational principles were initiated. One is that education belongs to all the people--not just a privileged few-that education is for all who have the ability and desire --regardless of their social status or financial situation. Second is the principle that knowledge exists for use. This reflects a concern not merely with knowledge for knowledge's sake, with no regard for its application. Rather, this is a concept of education for action--education directed toward helping people understand and solve the problems which they encounter from day to day--education aimed at the goal of helping people earn and enjoy a better way of life.

It is interesting that the U. S. Department of Agriculture was founded on the same two inherent principles. This new government agency was authorized "to acquire and diffuse among the people of the United States useful information on subjects connected with agriculture." Thus we see that a basic purpose of this department was education--education for all the people and education for use.

It quickly became apparent, however, that these two institutions could not accomplish their objectives without having a body of scientific knowledge to teach. So, in 1887, federal funds were provided to set up and maintain experiment stations at the Land-Grant Universities to complement the research being carried out directly by the Department of Agriculture. Home economics departments were introduced in our Land-Grant Universities during this same period, with the first home economics research underway by the turn of the century. From then on, the body of knowledge in all aspects of agriculture grew rapidly.

It was soon recognized that to depend on classroom teaching to bring the findings of research into practical use was at best a slow process. Training a relatively few farm boys at our agricultural colleges was fine --but it wasn't enough.. Something more was needed to bring the research directly to farmers.

Soon various educational efforts were underway in several States to demonstrate to farmers the application of this new knowledge. This was

the beginning of extension work and led to the establishment of the Cooperative Extension Service in 1914.

Extension was formally organized a little more than a half century after the Land-Grant Universities and the U.S. Department of Agriculture were founded on the dual principles of education for all and education for use. Thus these two institutions were joined together in a cooperative educational endeavor to carry out the lofty objectives envisioned by the leaders of 1862.

Research and extension teamed up to help farmers and homemakers put science to work on the farms and in the homes. Working together, they have made enormous sontributions to our Nation's growth and to our society.

Contributions to Growth

In 1862, about 60 percent of the U. S. labor force was engaged in agriculture. Ours was a predominantly rural society. Now, with a population of about 185 million people, less than 10 percent of our labor force is working on farms.

One hundred years ago, one farm worker produced food and fiber for less than six people. By 1900, he was producing enough for seven. Output climbed steadily to 1940 but the most spectacular surge has taken place in the last 20 years. In 1940, one farm worker's output was sufficient for 11 persons; today one worker produces for more than 26 persons. By comparison, one farm worker in the Soviet Union produces for less than 6 people.

Output per man-hour of the U. S. worker has more than tripled in these 20 years. In fact, farm productivity per worker in my country has gone up more in these last two decades than in all recorded time prior to 1940.

In 1940, it took an American farmer 79 hours to produce 100 bushels of corn, 44 hours for 100 bushels of wheat. Today, only 15 man-hours are required to produce 100 bushels of corn, 13 hours for 100 bushels of wheat.

If we were still producing our agricultural needs with methods in use in 1940, farm production costs would be an additional $13 billion a year. If these costs were passed along to consumers, the American public would be spending some $30 million more each day for food.

As a result of our increasing efficiency, the average American wage earner spends about 20 percent of his disposable income for food. The average Russian citizen, on the other hand, must spend more than 60 percent of his income for food. The fact that we have to spend such a small percentage of our income for the products of agriculture means that a greater share of our income is available for other goods and services--creating new demands and expanding markets--and stimulating economic growth.

Because of our increasing efficiency, we have millions of people available for employment outside of agriculture--workers producing other things which contribute to an improved standard of living.

Much of the economic development and social improvement in our nation in the last 50 years can be related directly to our advances in agricultural efficiency and productivity and to our free enterprise system which encourages and rewards the exercise of maximum individual initiative. Extension education has proven of incalculable benefit--not

just to farmers--but to the entire Nation and to all of our people.

Evolution of Extension

Such advances did not come about rapidly and without much effort. Indeed, Extension faced a very difficult task in the early days of gaining recognition and acceptance.

Extension education in the United States has seen three distinct periods in terms of public reaction. These three periods evolved gradually with no sharp dividing line between them. As we discuss these, perhaps you will see some similarities in the direction extension in taking in your countries.

First came a period of "skepticism" in which farm people were reluctant and even hostile at times to ideas advanced by Extension. Next, as public confidence was gained, we moved into a period of "acceptance" of Extension recommendations. The third period, in which we live today, is one of "dependence." Agriculture in the United States today is a technical, highly competitive business in which farmers recognize the absolute necessity of using the best and most up-to-date practices. They are highly dependent on Extension educational programs to provide this information.

In my opinion, a number of factors have contributed to this evolution from skepticism to acceptance of and dependence on Extension education in the United States. These factors are in a large measure responsible for Extension's success in contributing to agricultural development and economic growth in my country.

First, Extension's efforts have been strictly educational. They have not been related to commercial endeavors or government regulatory programs. They offer one primary product-scientific truths It has been most helpful for Extension to be an integral part of the State Land-Grant Colleges and Universities. The reputation which these institutions have earned--a reputation for objectivity, for truth seeking, and for being non-political --has contributed much to the acceptance of and reliance on Extension work in the United States.

Extension work was built upon a sound research base, recognizing that an educational program can be no better than the subject matter being taught. There has always been very close working relationship between research and Extension within the Department of Agriculture and the Land-Grant Universities. Such close liaison has contributed to more effective and meaningful research efforts as Extension provided the channel through which problems developing in the field could be quickly brought to the attention of the research worker.

Another strength of Extension in my country is its tie with and support by all three levels of government--Federal, State, and local or county.. Instead of supporting three separate and perhaps duplicating programs, all three levels of government have joined together in a cooperative endeavor which has no counterpart from an organizational standpoint in my country and, to my knowledge, elsewhere in the world.

People-Oriented Programs

Perhaps the most basic principle growing out of a half-century of Extension work in the United States is the recognized importance of developing and orienting programs in response to the needs and desires of local people. We say that our educational efforts are built from the people up

--not from the government down.

At the country, community, or farm level, the Extension worker helps people analyze their problems, survey their resources, and consider alternative courses of action for effectively resolving their problems and obtaining maximum use of their resources. Once the individual, the family or the community group decides on a course of action, the Extension worker through programs of education, assists them in reaching their goals. So we say that Extension is a "people-oriented" program.

The fact that local people have played a major role in guiding these educational efforts has contributed much to the acceptance and ultimate effectiveness of Extension work. In the eyes of many people, Extension has become "our program"--not a government or university program.

For Extension to be, in fact, a people's program, the Extension worker must understand the people with whom he works. He must know the local conditions, the social structure, the economic status, habits, traditions, and attitudes of the people. His educational efforts must be fitted to the interests and abilities of the people. Obviously he must teach within the ability and resources of the local people to adopt. As a basic principle we commonly say that we must start with people where they are, and not try to superimpose a program or a system developed for an entirely different set of circumstances. For Extension to stimulate individual initiative, its efforts must be based on cooperation and mutual respect.

A related principle is that the extension worker must be prepared to learn from the people he serves. A practice that may appear outmoded may actually be a necessary adaptation to local conditions. Some of the most valuable research results attained by our experiment stations have come about through testing and improving the common-sense solution to some problem achieved by an operating farmer.

In keeping with the concept of local responsibility, Extension places major emphasis upon leadership development. This serves two purposes: (1) it provides training and experience to the individual to better equip him to assume positions of greater responsibility and leadership; and (2) it provides invaluable manpower assistance to enable Extension to more effectively carry out its responsibilities.

In the United States today we have about 11,000 salaried county Extension workers. We also have some 1,276,000 unpaid local leaders who are rendering most valuable assistance to our total program. These local leaders serve in various capacities--working with 4-H or Home Demonstration Clubs, as project or subject matter leaders, as members of advisory councils, or in other activities. In 1960, local leaders held some 1,400,000 meetings in which no salaried Extension worker was present. The total time contributed by these unpaid leaders equals the efforts of 54,000 full-time employees--or approximately 5 times the total number of paid county Extension personnel. Obviously, the effectiveness of Extension workers is multiplied many fold by the efforts of these local leaders.

There are other important aspects of leadership development. Extension has helped farm and rural people in the development of many different types of organizations--commodity groups, cooperatives, and others--each designed to achieve goals and objectives not likely to be reached by farmers on an unorganized, individual basis. Such groups have in turn effectively complemented Extension's educational endeavors.

One of these strengths of Extension work in my country is in its

total approach to the problems of the farmer, the home, the family, and the community. It is impossible to separate the occupational interests of the farmer from his home and family interests.

Programs of Extension home economics have contributed immeasurably to better living conditions of rural people--to more comfortable and convenient homes, better clothes, better and more nutritious foods, improved health and sanitation, along with many other advances.

4-H and other youth programs have been integral parts of Extension work since its beginning. In the early period of skepticism about Extension educational efforts, agents often worked through young people in getting their parents to accept new practices both on the farm and in the home. It was commonplace for the 4-H Club boy in his wheat or corn project to outdo his father. This didn't happen many times, however, until the father was following the practices which the son had already proven to be good. Such experiences opened the door to more ready acceptance of other improved practices.

While youth programs serve very effectively in helping to grow taller and better corn and other crops, their primary contribution has been in developing taller boys and girls--not taller in the physical sense--but boys and girls who stand higher in terms of citizenship, leadership, willingness to work, cooperative attitudes, strong moral values and other personality traits which help them to develop into more useful citizens. Today we have some 22 million 4-H alumni representing better than 10 percent of our total population. Included among this alumni group are many national leaders in government, business, industry and education. 4-H represents one of the most highly regarded and universally accepted youth organizations in my country.

## Changing Methods

Extension has employed a variety of educational methods. One of the earliest, the demonstration, continues to be effective. Its value was aptly expressed by the late Dr. Seaman A. Knapp, who introduced this basic teaching tool. He said: "What a man hears he may doubt; what he sees he may also doubt; but what he does himself he cannot doubt."

Today Extension workers in many countries report that the demonstration is their most useful method of convincing the least informed and most skeptical to adopt improved practices. Satisfying results with this method build people's confidence and pave the way for successful use of other methods.

As people gained more confidence in Extension work, we have made effective use of more indirect techniques--bulletins, circulars, newsletters, and mass media--magazines, newspapers, radio, television. Exhibits, films, slides, and other visual aids also have demonstrated their value in creating awareness and interest in an idea.

None of these methods, however, can completely substitute for personal contact--for the direct consultation, advice, and assistance which Extension workers have traditionally provided. Throughout the years, an empathy has developed between professional workers, volunteer local leaders, and rural families--a type of mutual respect which represents one of Extension's most valuable assets.

We have recognized a continuing need for evaluating our teaching methods as well as our programs. As a result, we have a growing body of knowledge on the effectiveness of methods in different situations and the

factors which influence the acceptance of ideas.

Extension has had to make many adjustments to meet rapidly changing conditions. Initially Extension agents were concerned with helping the farmer or the homemaker adopt individual practices--the control of some insect pest, the use of an improved variety, the employment of an improved method of preserving food, etc. Later we began to help the farm family integrate all of these improved practices into a total program. Educational assistance in the management of total resources on the farm and in the home has received increasing emphasis. This type of overall approach to the solution of problems and the development of resources has broadened in recent years as Extension focused increasing attention on community or area development programs.

As extension programs developed, we recognized the strong influence of personnel training on the program's success. The extension worker needs adequate pre-service training in both subject matter and educational methods. And he must be provided continuous in-service training opportunities to enable him to keep abreast of constantly changing conditions.

Our staffing pattern is changing also in response to new demands. Traditionally most of our county workers have been generalists in subject matter--working with a broad array of problems confronting farm families and rural communities. They have been assisted by a corps of subject matter specialists at the State level who provided technical support and subject matter training to the county workers.

As our agriculture has become increasingly specialized and complex, requiring the very best in technical skills, there has been a growing awareness of the need for bringing the more highly specialized educational assistance in more direct contact with the farmer and his problems. Consequently, today we are moving towards more specialists and fewer generalists at the area or county level to meet this changing need.

There have also been marked shifts in program emphasis as conditions have changed. Extension was created in the early days of World War I and its initial efforts were directed towards greatly expanding agricultural production to meet increased wartime demands.

Extension was confronted with an entirely different set of circumstances in the 1930's when a severe depression gripped the country--with farm prices at an all time low and with excess production of agricultural commodities presenting grave problems. World War II quickly changed this situation and Extension was again asked to "help food win the war and write the peace." The strong demand for increasing agricultural production continued during the postwar period. Then the Korean conflict provided further incentives to increased production.

In the last 8 to 10 years, however, we again have been faced with excessive agricultural production, declining farm prices, and serious adjustment problems in agriculture.

Today Extension is directing more and more of its efforts toward the solution of rather severe social and economic adjustment problems which have grown out of a tremendous technological revolution in agriculture in the last two decades.

There is obviously not enough time to discuss in detail various areas of current program emphasis in Extension in my country. I would like to mention briefly, however, one effort of national scope which, in my opinion, offers great promise. The principles involved in this effort may well have some application in other countries. This is a program we call Rural Areas Development.

Basically, this is a unified program of total economic development for rural areas. It is unique in that it calls for the involvement and close cooperation of all agricultural, business, industrial and other groups which have an interest in or can contribute to the development of an area's resources. Under this program, these groups come together, analyze an area's problems, survey its resources, and develop programs and goals whereby these resources can be channeled into their most productive use. This may be in agriculture, for industrial development, recreational purposes, or other uses.

Extension has the responsibility for organizational and educational leadership in this effort. This total approach to economic development of an area provides an opportunity to apply some basic principles that Extension has used so effectively in agricultural development programs in the past.

There are many logical reasons for such an overall approach to an area's development. For example, agriculture and industry are closely inter-related, often highly complementary, and at the same time highly competitive for resources, particularly manpower. So development of agriculture and industry within an area should be considered in relation to each other.

This is a program growing out of the unique social and economic adjustment problems of the day. Obviously, Extension efforts must always be flexible and responsive to change. As people's needs and problems change, Extension must adjust with the times. It must continually seek new and better methods--methods which serve the present and the future--not the past.

## Sharing Ideas

In reviewing development of extension work in my country, I am not suggesting that our organization and programs should serve as a model for your countries. Such an implication would directly contradict the fundamental belief that extension programs and methods must fit the cultural patterns and needs of the people.

I do suggest, however, that over the years there have evolved certain basic principles of extension education which can be applied broadly if due regard is given to the different circumstances involved.

Much of our development in the United States can be traced to the infusion of people and ideas from other nations. We are a relatively young nation--less than 200 years old--and lack the rich cultural heritage which your countries enjoy. Many of our accomplishments can be credited to the use of ideas which we have borrowed from others.

By adapting these ideas and coupling them with our own, we have developed a type of hybrid vigor which has contributed much to our progress. The basic goal of the Agency for International Development is to share with others the things we have learned, many of which have grown out of ideas we have borrowed.

As President Kennedy has said, this is the Decade of Development. The accomplishments of nations, working together, in the years immediately ahead will determine to a large degree "the kind of world in which we and our children shall live."

We welcome the opportunity to strengthen still further our bonds of friendship. Through such cooperative endeavor we can work together for the development of a world in which hunger, poverty and privation might be abolished and men and nations might be free.

## SEMINAR PROCEDURE

Remarks by Mr. R. W. Shoffner
Seminar Coordinator
Agency for International Development, Washington, D. C.

The Agency for International Development in Washington requested me to act as consultant to this seminar. Consequently visits were made to many countries of the region to determine the objectives, duration, agenda, procedures, and to select a host country. It has been a rewarding experience to visit in your countries and especially to see your Agricultural Extension Services. I regret that I could not visit all of the countries of the region.

Many good suggestions for the seminar came from the various countries and we have incorporated most of these ideas in the agenda. Jordan was mentioned in many countries as a logical place to hold this seminar because of its central location, opportunities for field trips, good Extension program, and its fine staff. I appreciate the role as hosts played by the Government of His Majesty King Hussein, the Ministry of Agriculture, its Rural Development Department and other officials of the Hashemite Kingdom of Jordan.

An Executive Committee will be formed by the seminar delegates from each country. The purpose of this Committee will be to guide the proceedings of this seminar, complete the program, appoint a resolutions committee, an editorial or reports committee, and to name Chairmen for the general sessions.

Four main subjects dealing with Agricultural Extension work will be introduced by speakers. These will relate to philosophy and scope, program planning, administration and supervision, and communications as they relate to Agricultural Extension work.

We have placed each of you in one of four discussion groups. Each group will meet with an American advisor as temporary chairman. The temporary Chairman will preside only during the election of a permanent Chairman and secretary-reporter. Each of these four groups will discuss the same topic following the presentation by the speaker or speakers and report back to the general assembly. A summary report of these four reports on each topic will be prepared by the editorial committee and becomes a part of the final report. Guide sheets have been prepared to more closely identify your discussion topic and assist you in initiating discussion in your groups.

This seminar has opened with indications that it will exceed all expectations and become a memorable experience for each of you and a step forward in the development of Extension programs in this region.

# RECEPTION BY H.M. KING HUSSEIN

His Majesty receives token gift at Basman Palace after accepting honorary membership in Seminar which he had honored by his patronage. Presentation was made by Khalid Haj Hassan, Director, Rural Development, representing delegates.

Palace visit was followed by luncheon for delegates in Amman. L. to R. Geoffrey W. Lewis, Deputy Chief of Mission, U.S. Embassy; Dr. Qassem Rimawi, Minister of Agriculture; Russell S. McClure, Director, U.S. AID Mission to Jordan, and Khalid Haj Hassan.

# THE FUNCTION OF ADMINISTRATION AND SUPERVISION IN AGRICULTURAL EXTENSION

**Address by Mr. Mohammad Huneidi, Assistant to the Director, Rural Development Department, Jordan**

Administration could be viewed as a process whereby all the different parts of any agency or organization are orderly brought together to function in reaching objectives. Supervision which plays the role of keeping the respective agency or organization function orderly and in a progressing way could be viewed as an integral part of the same process.

The act of collecting the different parts of any one agency and placing them where they should be is not easy or simple. It entails many factors, each of which is deemed important and necessary. Such factors include: (1) A general evaluation of the situation. (2) Preparation of a general administrative chart of the setup. (3) The selection of suitable employees. (4) The geographic placement of the employees. (5) The building up of the responsibilities and duties of the employees. (6) The engineering of a workable and practical scheme of administrative communication.

When one reviews the factors mentioned he will soon know that neither the technicians alone, nor the administrators alone, would be able to do the job needed and it becomes very apparent that it is a cooperative deal between the technicians on one hand and the administrators on the other. Such a cooperative deal resembles that between the owner of a house and the engineer who is going to draw the plans for the house and those who are going to build the house. The owner states to the engineer the specifications he wants and possibilities available and then the engineer is able to make the layout of the scheme. Without such a communication between parties the work would be impossible.

Our subject of discussion this morning is the function of administration and supervision in Agricultural Extension. To be able to present to you such functions it is important to discuss the factors as these were mentioned a little while ago, the very functions of administration in Extension:

1. Evaluation of the Situation:

   The objectives of Agricultural Extension whether in Jordan or Nepal or Greece or any other country of the world are practically the same. But those countries are quite different from each other. They are different in their physical geography, their climate, financial and technical possibilities, and last but not least in their culture and needs. Such differences from a qualitative and quantitative point of view have much to do with the application of extension education in agriculture. They are decisive factors on the purpose, scope and objectives of the agency, its growth and progress, on the system according to which its going to function and articulate. Such differences are being presented to you on an inter-country basis and

they may be true on an inter-district basis in the same country. When considered on an inter-district basis the results of such an evaluation would share in the layout of a more practicable agency that would meet most of the needs of the country.

The host of information that results from making such an evaluation is deemed very important and necessary to the administrator and technician, and both have to cooperate to make it a success, each for the sake of his respective endeavour which is an integral part of the extension process and program which is to be put into practice. The evaluation is not done for once only, but should be done periodically. Doing it periodically will help the administrator to reconsider the whereabouts of things and keep them functioning in the best suitable way. This activity should take place before setting up the agency and during its existance.

2. The General Administrative Chart:

This kind of a chart reflects a picture of the Agricultural Extension Department and its constituencies. It may contain present positions and those planned for the future. It usually contains the line of responsibilities and the relationships between the various parts.

3. The Selection of Employees:

In extension as in all other kinds of departments or services the matter of selecting the right men or women for a position is always a problem. Had it not been for the interfering factors this problem would not be big or extensive. It remains a problem and has to be dealt with one way or the other.

I mean by the interfering factors such things as politics, auxiliary finances impositions and the like. But when it is agreed to follow the merit system as it is being used in many countries of the world a good portion of the problem will be solved.

If the mentioned interfering factors are dealt with through a merit system there remains the matter of the turnover of employees. This turnover is not as big among men as it is among women. Everyone of us is conscious of the efforts and time put in training an extension worker regardless of the grade or rank of the employee. The investment put in him or her is indeed big and it is a great loss to lose an experienced, trained employee, at this early age of Extension. One cannot leave such a matter to be solved. The administrator has to trouble his head about such problems and find solutions.

4. The Geographic Placement of Employees:

The geographic placement of employees in a country-wide program is an outstanding problem. It becomes so, because living conditions are not the same across the country. In certain areas it is indeed very hard to sustain one's life. Everybody likes to be at one place and nobody likes to be in another place, while all are practically equally paid. Yet from an extension point of view, the residence of the Extension worker at his post or location in the Extension Unit under his responsibility is necessary, and residence should not be less than two years. Here comes in the administrator and sits on the stage. Should he offer special financial allowances according to the hardships of life in an area, or should he, while recruiting employees, make it understood that such and such a place is the individual's location? Or should he provide certain special facilities

for the employees in each place so that life would be bearable and enjoyable? All that we know from extension education is that the employee should have comfortable conditions at least in his living quarters in the field where he assumes his duties.

5. Making Job Descriptions:

One of the most important things in an agency is the securing of coordination and cooperation between the various branches or sections of that agency. To secure that, one should be able to avoid friction and duplication of work. The best way for avoiding such things is to define the circle within which each of the employees assumes his responsibilities and duties. That is to define all that he or she is supposed to do regardless of the grade in which he is placed. Every employee should feel that he is doing useful work and serving his nation, whether he be a driver, a messenger, an extension worker, or a director.

6. Administrative Communication:

Communication is concerned with the interaction of people individually, and in groups. This subject is inter-wooven with semantics, sociology, anthropology, psychology, education, and administration. Our interest lies with administrative communication within a formal organization.

Any governmental department usually establishes and maintains certain communication channels for use with persons who are memebers of that organization or subject to its authority and control. Often the communication process mentioned finds itself related to people outside our organization.

Every process or activity involving two or more people in an organization has an element of communication and any communication process in a formal organization works in three directions, down, up and horizontally. The flow of information in the above mentioned directions constitutes the functions of administrative communication. The down flow of information consists mainly of orders dealing with policy and procedure, organization and information. The method of transmitting information downward is either orally, or through audio-visual and written media. The upward flow of information consists mainly of reports dealing with all the phases of the work together with opinions, attitudes, ideas, suggestions, complaints, and rumors. The method of transmitting information upward is through written reports, or face to face contacts in conferences, interviews, and staff meetings, or through suggestion boxes. Horizontal communication is information transmitted among positions, or units, or equal level by such methods as newsletters, face to face contacts, by telephone, or through clearance and review and printed material.

The following factors, if properly observed in the media of administrative communication, will eventually lead to better coordination, improved morale and increased efficiency. These factors constitute a guiding set of principles for any communicator in a department:

a. Clarity: for better understanding there should be better manipulation and comprehension of language. Usually short sentences, short words and a quota of proper names and personal pronouns make the order or report a better one.

b. Consistency: any information processed should be consistent with previous and future information concerning the organization.

c. Adequacy: the goal in this context is to insure an optimum flow of information. This same goal should be applied for the quantity and the details in which an order or instruction is presented.
d. Timing and Time Lines: the situation under which an order or instruction is given should be taken into consideration so that uniform interpretation can be insured. A matter of equal importance would be transmitting reports or information on time because out-of-date information is as bad or worse than none at all.
e. Distribution: before a message is transmitted its audience and their nature should be determined, in order to put it in terms they can understand.
f. Adaptability and Uniformity: there should be a good balance between adaptability and uniformity in administration. Uniformity will secure a maximum degree of standardization. Flexibility and suitability are especially important in country-wide programs, because of the inherent differences in situations and individuals concerned.
g. Interest and Acceptance: in order to secure effective communication there should be interest and acceptance so that a positive response to an order or instruction can be assured.
h. Enforcement: for an order to be respected it should be enforced and for a report to be useful there should be "follow-up".
i. Exceptions: in spite of the fact that exceptions establish precedents, they should be looked upon as supplementary rather than undercutting basic orders. Instructions should be revised in order to include exceptions that become a rule.

The main directional flow of communications mentioned is downward, upward, and horizontal. Two outstanding items in the first two directions should be given some special consideration. Those two items are orders and administrative reporting.

Orders:

The downward flow of information is dominated by orders of which the greater number deals with policy and procedure. The policy furnishes an underlying basis for taking a specific action. Procedure is the specific steps, methods, or routines to be followed in carrying out established policies. Orders may be divided into two main types, discretionary orders which are characterized by such expressions as "may be", "wherever practical", or "it is recommended" and the mandatory orders characterized with words like "must", "shall", and "will".

Administrative Reporting:

Reporting is one major item in the up flow of information. A report is a device that measures performance and controls cost. It serves the need for both long term planning and current scheduling of work, checks conformance with the organizational policy and procedure, transmits information of special interest or importance and facilitates the coordination of widely separated operations. Reports establish written records of events that may have future reference value. Obviously reports should be clear, consistant, adequate and interesting. Reports exist to help in executive control, improve the quality of planning, and give a variety of incidental or long-term information. A report should be interpreted, consolidated, and presented in due time. In order to insure better reports distortion should be avoided by knowing the obstacles that hinder the presentation of a report.

## ADMINISTRATION AND SUPERVISION IN EXTENSION

### Summary of Four Discussion Group Reports to General Session

The organization and conduct of an Agricultural Extension Service is much the same everywhere. It should be attached to the Ministry of Agriculture and be separate from the research, service and regulatory departments. However, Extension specialists need to keep in touch with research so they can give the agents technical backstopping. The organization must have comprehensive programs for farm youth, home makers, and farmers. An adequate communications media section is essential to serve the needs of all levels of personnel, especially the local agents.

Administration can best function by the use of straight line authority. Supervisors should support their staff and their programs by making sure that the programs are effectively carried out. The coordination of Agricultural Extension Service activities with those of other departments and agencies is a responsibility of supervisors.

Adequate administration and supervision will create and make known to all an effective communication channel, or channels, that will allow employees to reach the highest authorities, if necessary. These channels carry information to persons at all levels concerning the objectives and procedures of the organization. Adequate records and reports should be devised and kept without paper work becoming an end in itself.

Job descriptions need to be developed for all types of personnel. The supervisors will require generalized training in agriculture and supervision in order to give overall support to the agents. A good agent or technician does not always make a good supervisor. Good supervisors must be more than inspectors; they should be able to lead and train the agents to help the farmers.

Adequate administration and supervision should include a vigorous training program for agents and other types of personnel. This would include in-service training sessions, program planning, and liaison with specialists and administrative branches. An annual conference of all personnel should be held in order to allow an exchange of ideas and to orient agents on policies and procedures.

At the local level, in the early stages, only one generalized agent is needed. As the program expands and develops, a Home Economics agent and a Youth Worker may be necessary additions.

# WHAT WE ARE TRYING TO DO IN AGRICULTURE EXTENSION AND WHY

Address by Mr. M. Aslam Zafar
Deputy Agriculture Development Commissioner,
Ministry of Agriculture, Rawalpindi, Pakistan

Pakistan needs to step up agricultural production. Agricultural production is the result of efforts of millions of cultivators spread over the country. Age old methods of tilling the soil are still widely practiced. Low yields and hard labor keep the farmer engaged in a continuous struggle for existence. Yet he stands firm in the face of adversities ready to serve the nation. Now it is for us to see that the results of the researches carried out by able scientists are brought to the door steps of each individual cultivator.

Before I proceed with what we are trying to do in agricultural extension I would like to give a very brief introduction of my country in this context.

Geographically, Pakistan consists of two parts - East and West Pakistan.

East Pakistan, the area of which is 55,000 square miles, has two great rivers, the Brahamputra and the Ganges, and their innumerable tributaries form a network of inland waterways. The climate is humid and warm during the summer and mild and dry during the winter. Rainfall is heavy varying from 50 to 135 inches and the bulk of it falls during the monsoon season which extends from May to September. Rice, jute, sugarcane and oilseeds are the main crops and some, like rice, are raised as many as three times a year.

The landscape of West Pakistan, with an area of 310,000 square miles, varies from the snow covered peaks of the Himalayas in the north to the arid desert in the south and southwest. Five rivers run through the country which provide irrigation waters for the crops. Rainfall varies from 4 to 40 inches. Main crops are wheat, cotton, sugarcane, maize, rice and oil seeds.

Like most of the middle eastern countries, agriculture in Pakistan is conditioned by the country's water supply. There is too much water in East Pakistan during the summer months. Winter, on the other hand, is generally dry over the greater part of the province and winter crops can be grown successfully only if the land is irrigated. In West Pakistan rainfall is erratic and insufficient during the major part of the year and crop husbandry is mainly dependent on canal or well irrigation. An extensive network of irrigation canals has been laid out.

The total area of Pakistan is about 234 million acres. It consists of all types of soils. Out of this about 62 million acres are cultivated, of which 24 million acres are irrigated. There are 0.55 acres of cropped area per capita in East Pakistan and 0.9 acres per capita in West Pakistan.

Agriculture is the main industry of the country. It contributes 57 percent to the national income. It provides 95 percent of the foreign

exchange to the country and 75 percent of its labor is employed in Agriculture.

Our Needs:

Development in the Agriculture Sector is of chief importance to our economy. Government is conscious of the fact that agricultural development must be brought at an accelerated pace. In the first place, it is desirable for the nation to achieve comparative self-sufficiency in major food-grains. The next major objective is the increased production of other foodstuffs in order to add quality and diversity to the diet. The final, but perhaps even more important, objective in the Agriculture Sector is to increase its contribution to exports and to foreign exchange accumulation either through increasing export crops or through manufactures or by reducing the need for purchasing foodstuffs abroad. All these combined will give a great impetus to economic activity and should be given first priority. They can contribute greatly, can perhaps even be the key factor, in energizing the "economic take-off" that the nation is so urgently striving for. It is not an understatement to conclude that such a take-off can hardly be accomplished without first making significant improvements in the agricultural production and in the lot of the farmers whose present position is not very satisfactory.

Our Extension Organization, as it exists at present, is inadequate to do the job which it is expected to do. In order to fully appreciate the extension methods which we propose to put into practice, it would be desirable for me to give you a little background on the farmers of the country.

The Farmer:

A recent survey of the farmers' position has brought to light certain significant facts. The critical position in East Pakistan owing to population pressure on very small holdings; the critical position in the irrigated plains in West Pakistan owing to salinity and water-logging; the overcrowding erosion and hazardous dependence on rains in the sub-mountain areas; the improper use of huge range lands and the smallness of their cultivation in the country's economy; the denudance in the hill catchment and flood hazards which results from it; call for immediate steps in improving the position of farmers. These facts present a somber overall picture at a time when the biggest national priority is to increase agricultural production to feed the rapidly increasing population.

When the focus is altered from the overall view to the individual farmers' position with a few notable exceptions, the picture revealed is not very pleasant. Low yields, very small incomes, little to spare for capital investment and fragmented holdings are eating away the very basis of satisfactory farming.

It is to the farmer that the nation has to look for participation and cooperation in any plan for increased agricultural production and in spite of his discouraging conditions the Pakistani farmer is alive to the needs of the situation, is anxious to find a way out, to better his lot and is not unresponsive to new techniques provided ways and means for their practical application are brought within his reach and he finds them beneficial. Inherent skill and experience of farmers is unlimited. We have to tell them what is better and that is what our object is.

The Department of Agriculture:

In spite of the present somber overall picture of the state of agriculture, the country has natural assets which warrant considerable optimism if only they can be more satisfactorily used. It is universally known that techniques for increasing agricultural production are (i) better seeds, (ii) fertilizer, (iii) plant protection, (iv) better cultivation techniques and (v) short and medium term credit. The Food and Agriculture Commission recently set up by the Government of Pakistan has termed them the "Five Firsts". In the past, emphasis on agriculture has been lacking. The Department of Agriculture has been responsible for agricultural development in the country. The original purpose of the Department, operating under all the handicaps of minor provincial services, starved of funds and low in public esteem, was that of a very attenuated advisory service confined mostly to demonstrate to rural leaders and larger landowners. In no sense was it an action Department equipped to account urgently for something being done. With the research facilities of a negligible nature in East Pakistan and seriously impaired in West Pakistan, paucity of training institutes, inability to attract good youngsters and a totally inadequate personnel in the front line it has nevertheless been the natural first medium to turn to for handling the increasing complicated aims of development. It has been called upon to expand extension and demonstration services, to open and manage new seed farms, to organize a vastly increased supply of fertilizers and better seeds and develop the completely new subject of plant protection. It has had to open an engineering wing to operate tractors and bulldozers for cultivation and land clearance and to sink tubewells and operate power pumps. While the achievements have been notable when the Department's circumstances are taken into account, it inevitably falls far short of the needs.

For the vital front line the two officers directly in touch with the farmers are in East Pakistan, the Union Agricultural Assistant and above him the Thana Agricultural Officer, and in West Pakistan, the Field Assistant and above him the Agricultural Assistant. The posts above this level tend to cover too big an area and to be weighed down with administration to enable more than an occasional contact at the village level. A great deal, therefore, depends on the quality and capacity of those in the front line posts.

Farmers in the cultivated areas of Pakistan mostly live in villages and although these, of course, vary in size, it is customary for purposes of Extension to consider an average village as containing about 1000 people all told or about 150 farming families, the remainder having other occupations. These are the people at the bottom who have to be persuaded to improve their techniques of production. In East Pakistan the unit next above a village is called a Union which is held on an average to contain 10 villages or about 1500 farming families. The Union in East Pakistan is the lowest rung of the Agriculture Department's Extension ladder. Its Union Assistant is thus a keyman supposedly able by knowledge, personality and the provision of services, which he can supply to influence a manageable portion of the farming community. The approximate area which he is to look after would cover about 5000 acres but this in East Pakistan would be split up into many tiny holdings. The Thana Agricultural Officer who is a graduate in Agriculture takes care of about 15,000 farmers or 50,000 acres

In West Pakistan the bottom man, the Field Assistant, is supposed to

cover roughly the same number of farmers, about 15,000, as the Thana Agricultural Officer does in East Pakistan, although the area they farm in his case average nearer 100,000 acres than 50,000 acres. Above every two Field Assistants comes an Agricultural Assistant. He is roughly equal to the Thana Agricultural Officer in East Pakistan although he covers double the number of farmers (30,000) and some 200,000 acres instead of 50,000 acres. He is usually better trained being in most cases an Agricultural Graduate.

Under such circumstances, it is not surprising that the farmers complain that they do not see the Agricultural Extension Staff or when they saw them had no great confidence in their ability to be of much service. In point of fact, quite apart from their insufficient numbers, inadequate knowledge, and poor status in terms of pay and facilities, their ability to be of service, even in the "Five Firsts", is dependent on the availability of good quality seed, fertilizer and plant protection materials in store near enough to the farmer to induce him to use them. It is also dependent on the existence of an effective supply line to such stores which free the front line men to spend their days where they ought to - in the farmers' fields.

Agricultural production can be increased by a concentrated and sustained campaign. Farmers must be supplied with better techniques and materials they need for improving their crops. The present Extension service of the Department of Agriculture is not properly being utilized. The present Agricultural Extension Service mainly sells seeds and fertilizers to the farmers and provides plant protection measures. This is not really the job of the Agricultural Extension. Programs have been developed which are now under implementation whereby the extension service staff is being freed from the duties of receiving, checking, distributing and accounting for fertilizer, seeds and other supplied and will be able to fully devote themselves to their main work of Extension in the field. The Extension service is being expanded to look after the extension work. The availability of supplies will be handled by the newly setup Agricultural Development Corporations in both the Provinces.

Scope of Extension:

Keeping in view the limited technical manpower it has been decided to restrict the scope of the Agricultural Extension service to operations which can be carried out by a worker of the level of the present Union Assistant in East Pakistan and the Field Assistant in West Pakistan. These operations are:

a) popularization of good seed;
b) popularization of chemical fertilizers and farm-yard and other manures;
c) wide-spread use of plant protection measures;
d) crop sanitation measures;
e) adoption of improved agricultural practices;
f) increasing the acreage under fruits, potatoes and other vegetables and expansion of high income crops;
g) extension of minor irrigation works in East Pakistan; and
h) use of tubewells and percolation wells.

Seed:

Good seed forms the basis of good crop yield in the field. Agricultural Development Corporations have been set up in both the Provinces which are responsible for the production and supply of improved seeds to the farmers. Duties of the Department of Agriculture in this matter will be limited to advising the farmers on suitable varieties and in persuading them to use them.

Fertilizer:

The use of fertilizer has been spreading rapidly in the country and this is a great tribute to the Extension organization. It may be seen that the supplies have jumped up from about fourteen thousand tons in 1952 to about five lakh (500,000) tons in 1961, and the demand is still increasing rapidly. Fertilizer is being sold to farmers at 50 percent subsidy. This step has been taken to encourage the use of fertilizer by the farmers.

A rapid soil fertility scheme has been started in both East and West Pakistan wherein experiments on the use of different types of fertilizers are conducted on the cultivators' fields. This has two objects:-

i) practical demonstration at the cultivator's field about the goodness of the fertilizer;
ii) to find out different doses of different types of fertilizer in each locality.

The results of the rapid soil fertility scheme indicate that yields can be further improved by adding complete fertilizer (NPK) instead of just nitrogen as was done when fertilizer use was started. This has given us a new line of work and we are concentrating on this aspect.

Plant Protection:

Plant protection measures are becoming more and more popular. While Government has to do the necessary spraying in the case of large outbreaks which have to be dealt with quickly to prevent or control epidemics, it obviously cannot afford to spray every field that is cropped. We are persuading the farmers to do this work themselves and the guidance will be given by the Extension service. The supply of pesticides and spraying equipment will be the responsibility of the Agricultural Development Corporation.

Protective campaigns on sugarcane, rice, cotton and fruit trees have achieved a fair measure of success but there is need to plan control work on a much wider and more continuous basis.

Crop Sanitation:

Crop sanitation measures have not received sufficient attention in the past. However, certain steps have been taken in this regard. For instance, removal of cotton sticks to avoid insect spread before a particular date is a must and is enforced by an executive order.

Cultural Practices:

The improved cultural practices on which the Extension Service is

focusing its attentions is likely to bring quick results and every effort is being made to see that the improved practices are put into effect. In this connection, it will be necessary to arrange for the supply of suitable seed-drills especially for cotton and jute sowings, plows, and other implements. The manufacture of these implements on a large scale has been taken up so that farmers do not suffer for lack of supplies.

Horticulture:

Extension of horticulture is a matter of demonstration and persuasion and this is being expanded on a large scale.

Minor and Lift Irrigation:

Irrigation is very important for the crops and especially in East Pakistan during winter. Since there are no rains during winter, with small irrigation schemes another crop can be grown which can bring additional income to cultivators. This program is being handled on a large scale by the Agricultural Department. Similarly in West Pakistan irrigation facilities are being expanded rapidly. This includes the use of tubewells, percolation wells and lift irrigation.

Extension Methods In Use:

Information Service: It plays a vital role in disseminating knowledge to the farmer. It provides a vital link between the farmer and the scientist. Information Service has been setup in the Provinces. It issues books and booklets in English as well as in the local language. In addition, bulletins, leaflets, posters, news bulletins, hand-outs, charts, models, photographs and monthly journals are issued to the farmers. This provides them with latest information on improved agricultural practices. Radio talks are also given by the experts in the "Farmers Program" broadcast over the radio. Films and slides on agriculture are also prepared and shown to the farmers. Dramas depicting different aspects of agriculture are also staged.

Mobile publicity vans are also provided to the Extension staff for publicity work. These vans are equipped with microphones, tape-recorders and movie projectors.

Demonstration Farms: During the past years demonstration and plots have been the best media for convincing the farmers about the usefulness of improved agricultural techniques. Since the farmers are illiterate, the best thing is to show them in their fields what is best for them. "Seeing is believing" has proved that best argument in convincing the farmers.

Cash Awards to Good Farmers: In order to enlist the full cooperation of the cultivators and to create a healthy spirit of rivalry among themselves to increase the acre yield of crops and to give impetus to the general agriculture, it has been felt necessary to provide some incentive to the cultivators in the form of cash prizes. Money is the best incentive hence cash prizes have been given and this has proved quite useful.

Cash Awards to Agricultural Workers: In order to create a spirit of healthy competition among the local agricultural officers, cash prizes have been awarded to the agricultural workers in each district for efficient demonstration due to which the cultivators have been able to pick up

improved practices.

Exhibitions: Agricultural fairs and exhibitions play a very important role in inducing the farmers to adopt improved methods of agriculture as these help them to see personally the results of improved agriculture. Exhibitions are generally held at the district level, the divisional level and the Provincial headquarters. Frequently, small agricultural fairs are also held in the rural areas.

Farmers' Days and Weeks: Farmers' days and weeks are observed on Government and private farms to get the farmers acquainted with improved methods of agriculture. This also provides an opportunity for the Extension workers to arrange group and mass meetings of the cultivators who gather on this occasion. The object of this is to supply materials produced and methods adopted by the Department of Agriculture to the farmers in simple and palatable manner and motivate them to adopt the improved agricultural practices.

Crop Village: This is a method of demonstration for which one village is selected where one crop suitable for the locality is cultivated in a scientific way. This helps the farmers to see for themselves the improved methods of cultivation and its good results. As this sort of demonstration covers an area of suitable size, this can draw attention to many a farmer living within and beyond the village. The idea of crop village has been put into practice during the last year in East Pakistan and one village in each Thana has been selected for this purpose.

Model Village: The idea of starting model village is almost the same as crop village except that in the crop improved cultivation of only one crop is taken up while in the model village improved agricultural practices in all fields are adopted so as to make the village a model one so far as agriculture is concerned. Initially only one village is being selected in each sub-division.

Seminar and refresher course: Seminar and refresher courses are also held for brushing up the knowledge of agricultural officers working in the field. This also provides an opportunity for detailed discussions on certain subjects, or on problems that may arise during the course of work in the villages.

Vocational Centers: In addition to secondary education in agriculture given to the young matriculates, two years vocational training in agriculture is also given to other enthusiastic private farmers.

Future Setup: Changes in the provincial setup are being brought about to decentralize power. The effort is to have effective field organization in the areas of operation.

Provincial Agriculture Department

Agriculture Secretary

Advisor Agriculture

Directors of Agriculture - 5 in West Pakistan
4 in East Pakistan

These Directors of Agriculture will be assisted by the following of-

ficers at the Headquarters:

1. Plant Protection Officer.
2. Horticulturist.
3. Publicity Officer.
4. Economics & Marketing Officer.
5. Statistical Officer.
6. Accounts Officer.
7. Administrative Officer.
8. Agricultural Engineer.

In each District there will be a District Agriculture Officer, assisted by Agricultural Assistants/Thana Agriculture Officers and Field Assistant Union Assistant. The area of operation where maximum delegation of powers will be given is being reduced. The units of operation for the Agricultural Extension Service would be the district. The District Agriculture Officer would be responsible for the district.

An area of a district varies from 2,800 to 5,700 square miles and average cultivated area varies from 10,000 to 25,000 acres.

The Coordination work of the districts would be done by the Director of Agriculture of his region. He will be responsible for having a proper coordination and would provide a check on the work in the district. The District Officer will be the main person dealing with the agricultural activities in the district. The District Agricultural Officer will be assisted by Agricultural Assistants and Field Assistants. Each Field Assistant would be responsible for 10-15 Unions.

Responsibilities of Other Departments:

The other departments concerned which have been commissioned to help the Agricultural Extension in the field are:

The Revenue Department, The National Development Organization, and the Basic Democracies:

The responsibility of the development has largely been put on the Divisional Commissioners and on the Deputy Commissioners. Technically and administratively, Extension Service is answerable to the Head of the Department on the program of work, which is being coordinated by the Divisional Commissioner at the Divisional level and Deputy Commissioner at the district level. The District Officer has been given extensive powers over the National Development Organization in the district. He is thus in a position to ensure liaison between this and the Department of Agriculture and to ensure that they assist in encouraging and creating a genuine atmosphere of receptivity towards the work of the Department. This could help particularly in such matters as crop sanitation and eradication of weeds.

Land consolidation work is with the Department of Revenue and it has been made compulsory in West Pakistan.

Basic Democracies: We have tried to base our political system on the village councils. Each village will have a council with an elected chairman. All development and social problems will be decided by the Village Council in a democratic manner. The Village Council, however, will not be a corporate body and wherever necessary it will carry out, as in the past, its development work by voluntary contributions. The next higher council known as the Union Council will be a corporate body with powers to levy taxes. It will consist of any number of villages whose total population is about 10,000. Each Union Council will elect its own

Chairman. There will, similarly, be councils at each of the administrative tiers in the country viz., Tehsil/Thana, Sub-division, District, Divisions and the Provinces. These upper tiers will not be filled up by any further elections. There members will be from amongst the Chairmen of the Union Councils. You will see, from this that unless an effort has been made to give to a country, which has 85 percent of its population in the rural areas, a Government which emanates from the villages in its correct proportion, the functions and the duties of the Union Council which in fact are the parliament for three to eight villages would not be out of place. These functions encompass the whole field of development and civic life, many facets of which were not thought of in the past. Many other things for community development will be in the forefront. These Union Councils will extend a helping hand to Agricultural Extension Service.

Animal Husbandry Department:

The functions of the Animal Husbandry Department are being confined to veterinary work only and the breeding farms are being given over to the Agricultural Development Corporations. The Animal Husbandry Department would be responsible for veterinary work in the field.

Cooperative Societies Department:

The Cooperative Societies Department has to play a vital role in supplementing the Extension activities. It has been felt that the farmer does not get the supplies well in time. For this purpose, Service Cooperatives are being established in the rural areas to see that services are provided to the farmers well in time.

Mechanization Cooperative Societies are being established to see that mechanized cultivation becomes popular. Farming societies are also being established to see that the groups of farmers can be easily guided to adopt modern scientific methods who can make their own credit arrangements. The Cooperative Societies are being put to best use and there is going to be a close collaboration between Cooperative Societies and the Department of Agriculture.

Agricultural Development Bank:

Agricultural credit is one of the important factors which influence agricultural production. The farmers are poor and they do not have funds available for having their supplies at the sowing time. In order to tide over this difficulty, Agricultural Development Bank has been established which provides loans to cultivators on easy terms. There have been bottlenecks that the loans could not be freely issued to the farmers but the methods are being simplified to see that the credit facilities are made available to the cultivators without much difficulty. Farmers need short and long term loans. Short term loans are required for the purchase of fertilizer, seeds, small implements, etc. whereas long term loans are required for installation of tubewells, planting of orchards, buying of machinery, etc. Besides, taccavi loans are given to the cultivators by the revenue authorities.

An Experiment with Intensification of Extension Methods:

Model Scheme: The tempo of agricultural production in the whole country is to be intensified so that the country becomes self-sufficient in food and also earns enough foreign exchange to finance the development programs. Extension work has been taken up as a whole in the country. It was felt that in order to have definite results it will be desirable to introduce the program in selective areas wherein the agricultural extension methods could be fully exploited and larger yeilds are obtained per acre. Keeping this idea in view a Model Scheme has been introduced in seven districts of West Pakistan and five sub-divisions of East Pakistan. In these districts there is intensification of extension methods. The results have been very encouraging and last year increase in yield in selected districts over the other districts have been 66 percent in East Pakistan and 15 percent in West Pakistan. These trends are being carefully watched. It is hoped that this program will be extended to other districts in due course of time.

Home Economics Work and Rural Youth Extension Work:

Hitherto both these programs were being handled by the Village AID Organization. This Organization has been wound up and now the Home Economics work is to be taken up by the Cooperative Department and Basic Democracies whereas Rural Youth Work would be taken care of by Basic Democracies.

## EXTENSION PHILOSOPHY AND OBJECTIVES

### Summary of Four Discussion Group Reports to General Session

A primary step in establishing an Extension Service is to develop a general statement of purpose and indicate the scope of the program. The purpose and scope of Extension varies from country to country and is dependent on many factors including; (1) The country's stage of development, (2) government structure, (3) Extension's own stage of development, (4) character and experience of administrators and staff, (5) needs of the people, etc. However, most everyone agreed that in the NESA Region, Agricultural Extension's objectives should be: To help rural people raise their standards of living (social, health, economics, etc.) by informal educational processes that increase their knowledge and skills, and change their attitudes.

The groups recognized that the generally low economic levels of living of rural people in the region is caused by inefficient agricultural production and marketing. But this situation is closely related to, and often caused by, many other rural conditions such as; (1) Poor communications (roads, etc.), (2) illiteracy, (3) poor health and sanitation, (4) inadequate credit facilities, (5) a shortage of rural leadership and initiative. Furthermore, increased income may not result in a parallel improvement in family or community living conditions.

Thus it was decided the scope of Extension should be broad. A program developed with rural families and communities based on their primary needs will usually emphasize agriculture and home economics, and assist the people to secure the services of other governmental and private agencies.

Home Economics may concern itself with foods and nutrition, sanitation and health, textiles and clothing, home management and improvement, maternal and child care, and farm activities such as family food production. However, the needs of rural families should be the determining factor in planning this or any other portion of the Extension Program. Priorities should be selected to give impetus to the plan of work.

Many rural problems can best be solved by group or community action. It is therefore the Extension Agent's role to discover, develop and train local leaders and assist in establishing or improving socio-economic organizations (councils, committees, cooperatives) that will enable people to help themselves through the problem solving procedure of; (1) Appraising the situation, (2) identifying the problem, (3) proposing solutions, (4) choosing a solution and accepting responsibility, (5) planning and initiating action, and (6) evaluating the results.

The development of responsible citizens and leaders, the changing of attitudes, and causing people to adopt new or improved farm and home practices may be effectively accomplished both with and through young people. Therefore a strong rural youth program is essential to the rapid achievement of Agricultural Extension's objectives.

## PROGRAM AND PLANNING

Address by Mr. Rameshwar B. Singh
Agriculture Extension Officer,
Ministry of Agriculture, Nepal

The economic development of any country, particularly a country depending on agriculture, rests mainly on three things. How readily do the farmers change their old traditional ways regarding cultivation practices? How easily do they learn the new techniques and improved practices? and how do they take up and adopt the new methods in practice? This involves change of human attitude, change of skill, and change of knowledge. It is needless to say that no one will easily forget the environment where he or she was born and brought up, give up the traditional practices, or agree to live in a totally new environment. It is human nature that before taking up any new practice he thinks about it and studies it thoroughly. The moment his doubt is washed away, then and there he may come to the point of agreement. Thus, it takes time to impress the farmer and make him adopt any new methods of practices. For impressing people and making them adopt new methods and techniques, one has to use more than one way.

Before I discuss the main topic I think it is proper here to mention the agricultural condition and setup of Agriculture Extension in Nepal, so that all of us can easily visualize the situation and condition in which we work.

### Agriculture Extension in Nepal

The start of Agriculture Extension in Nepal was not an easy one. We lack enough technical personnel for the job and we were tremendously short of technical information, about our own agricultural situation. In the latter part of 1951, this program took a multipurpose shape and ultimately was raised to the status called Village Development Department for village activities in which other departments beside agriculture were engaged. Six village development centers were established in the first year to start Agricultural Extension work. For the field work purpose, Extension workers were trained. They are called Junior Technical Assistants. These J.T.A.'s are supposed to carry on the Extension work in the block level in close coordination with the village development worker. By the end of 1959, twenty-five such village development centers were established and in every block two to three Junior Technical Assistants were put to look after different jobs, Agronomy and horticulture work was looked after by one J.T.A., livestock and poultry by another, agriculture engineering by a third.

More than 90 percent of the people derive their livelihood from farming. Farming is on a small scale in a majority of cases and cultivators are, for the most part, poor, illiterate, and hard working. They live in the same pattern and follow the same traditional way of farming as their fore-fathers used hundreds of years ago. The unproductive nature of agri-

culture and livestock are two main factors which cause the rural people to live a hand-to-mouth existence. One can well ask, in a situation like this, what principle could have been adopted? Should we have started our program and planning with people or for people? We started our program and planning for the people at first because of the lack of literacy among rural people and lack of communication and transportation to approach the farmers frequently as desired.

Program Aims

People were totally ignorant about the value of fertilizers, insecticides, good agricultural implements to work efficiently and value of improved seeds and poultry birds. They could never apprehend their problems and the way to eliminate them. Thus, the program and planning were made from the top level, taking the following things into consideration:

The main aims of this program were:

1. To bring about a change in mental outlook,
2. To create an urge for better living,
3. To stimulate a sense of determination, sacrifice and group effort to achieve the end,
4. To introduce new methods and techniques in farming,
5. To introduce new crops, livestock and poultry,
6. To study the different local situations, and
7. To educate farmers so that they might realize their own problems and try to help themselves.

Important change in human behavior generally does not take place quickly. Changes in ways of thinking, in fundamental habits, in attitude and in interest develop slowly. In some respects, program involving education produces effects in the same way as water constantly dripping on a stone wears it away. There will not be much appreciable change in the stone in months or even years, but over a long period a definite erosion is noted. Nevertheless, we also noted as the program was continued over and again, that our farmers at least know about A/S and S/P (ammonium sulphate,) potash, compost, and the importance of improved seed. People became acquainted with a new variety of crop and saw the accomplishment of White Leghorn and Rhode Island birds in egg production. They knew the value of the cash crop. This result came by our effective organization of program continuity. Continuity refers to the provision in a program for one important recommendation to reoccur frequently, thus giving people an opportunity to come in contact with important ideas again and again. Continuity in program is basic to the achievement of cumulative effects, and may as well be called follow-up.

Since extension work was started, a definite program was made on the above basis. We never asked the need of farmers because they did not know their proper need and, on the other hand, we wanted them to realize their needs, problems and solutions, with the help of effective education by the principle of "seeing is believing and learning by doing." To carry out that short program, a proper target was fixed. To achieve that target for supplying equipment and materials for demonstration, a supply line was fixed weekly and monthly and a time-table was made that the Junior Technical Assistant, working in close coordination with V.D.W. (Village Development Worker) was to carry out. Emphasis was given to educational process. And as time went on, rural people started becoming more and more familiar with their needs and problems. By now the main objective of the plan has

been fulfilled, the basic foundation laid. We had been planning and working to make them understand their situation and difficulties better and to know what improvements in agriculture were possible and available.

Now the time has come to work with them, make a program with them for their own benefit so that they themselves may start taking initiative rather than we doing all the planning for them. Up till now Extension work was being executed by the Village Development Department at the first stage. As you heard in our country report, the Food and Agriculture Ministry and Department of Agriculture felt that the existence of a separate Extension Section was necessary to make and execute the P.P., (Program and Planning) more effectively and successfully and in the year 1959, a separate Agricultural Extension Section was established, under the Department of Agriculture. Although the program building from top level helped to achieve the objectives, we still are far from knowing the proper need and problems of the farmers in their day-to-day life. To know problems and needs and to find their solution, it is highly essential to work with them and to plan with them.

The main theme of Agricultural Extension was to uplift the economic social and moral status of each individual farmer, his family, community and the nation at large.

At this stage, we feel that the Agricultural Extension program and planning must be formed on the needs of people to make it significant and on their interest to make it effective. When the farm families help to plan Extension activities the plan naturally becomes more practical and useful. If the local people are involved in program planning, they have pride of authorship and a clear understanding of the objectives. They feel that it is their program. They readily make the efforts needed to achieve the objectives. To many a soldier in the last war "the objective" had a very definite meaning. He knew that a great deal of thought and planning had to be put into efforts to reach the objectives; that the success of the particular movement was judged in terms of whether or not the objective was reached, that success in reaching one objective affected other tasks and in turn had their accumulated effects upon the outcome of the war. He knew that each individual soldier had his own explanation and ideas about the objective according to his information, interest and responsibilities.

We should not forget that not all people need or desire to go in the same direction or equal distance. In Extension we must prepare to offer opportunity for people to move in various directions.

Objectives in Nepal

1. Better methods of crop production.
2. Better methods of crop purchasing.
3. Better methods of living.
4. Better methods of saving.
5. Improvement of education.
6. Changes in skill, behavior and motives.
7. Uplifting the present status of farmers economically, socially and morally by education process.
8. Changing attitude.
9. Providing a systematic plan of action and a plan for measuring results.

Principles

1. A sound program must focus on the needs of farmers. Program building in each situation should meet the needs and interests of the people involved in that situation. It is obvious that the needs are of two kinds, the felt and the unfelt. In this case, the Extension worker should convert the unfelt needs of the farmer into felt needs before he involves them in any action.
2. Sound program planning should start with the people where they are.
3. It must have a definite plan of work no matter how well the program is thought out. Unless and until it is carried out properly, it is useless.
4. Good program building should determine clearly stated objectives and solutions which offer satisfaction.
5. A good program should have a balance with items of assistance for all major social, economic and age groups.
6. It must focus on problems that are "most important" since it cannot be "all things to all people" at the same time.
7. It must provide for a system of priorities in line with local needs, interests and resources.
8. It must provide satisfaction for the people who participate.
9. A good program should provide for evaluation of results.

Methods

1. The technical specialists and the planning groups should assemble the basic facts about the local situation for use in developing program including the following information:
   a. Needs and interests of people.
   b. Educational levels.
   c. Sources and levels of family income.
   d. Marketing facilities and practices.
   e. Farming practices.
   f. Community problems and needs.
2. The technical specialists should asist in the long-term program by supplying primary and specific information and recommendations pertaining to their special field which should be considered by staffs and planning groups.
3. It should be a carefully prepared statement in written form that clearly sets forth the significant changes needed in the behavior of people and conditions in which they live.
4. Plans for initiating action through the strong village organization. In initiating any action consideration must be given to the means and motivation that can be used to get people together so that their reaction can be obtained through fairly representative groups of village people.

Rural people in Nepal unanimously act through their recognized leaders who guide general thinking and action of the village people.. Leaders are, in fact, the best channel of communication. So these people are involved cooperatively in the program planning procedures, although farmers in general also take part through village organization. Once they are convinced, they participate and support the program automatically. The Extension Section's policy is to involve as many people as possible in order

to have a really effective and meaningful program.

As presently organized, the following groups in Nepal participate in Extension Program and Planning with the rural people:

V.I.C. (Village Improvement Committee)

This organization includes about three villages. The chairman of the V.I.C., with the help of V.D.W. (Village Development Workers) and Junior Technical Assistants, meets once a year, usually in February. At this time, they discuss the current year's program planning as well as both Government and Village Resources in terms of men, material and money. They exchange views. Then each member goes and contacts the villagers of this assigned area individually and in groups. The V.I.C. then discusses and decides about the needs and fixes priorities. In this way, all the information collected by the different members is, analyzed and studied in a sort of general meeting of the chairmen representing different committees and they tentatively finalize the program and planning at the village level.

District Development Center

In this office, Block Development Officer, Zonal Agriculture Extension Officer, (where available) Junior Technical Assistants, and the chairmen of all the V.I.Cs sit together in a formal meeting. They discuss all the program planning prepared by the V.I.Cs and they visualize its feasibility as per the available D. D. Center Resources. Together with this program planning they fix a target and a calendar of operations and finally send their recommendation to the Central Office of Agricultural Extension.

Central Level

In this level all these matters are again discussed among the Subject Matter Specialist and Research Section personnel for launching the technical programs of their concern. As regards the financial and administrative support of the program, the Extension wing decides as per the general policies received from Department of Agriculture.

After completing all these processesses, the finalized program and planning targets and calendar of operation are sent back to Zone and D.D.Cs with concurrence, after making necessary changes, if any.

Now the question could arise as to how much the illiterate rural people of Nepal are capable and ready to be "planned with", are able to know their real needs and are aware of what improved methods are available to them?

The only answer to this that I can give at present, is that everything takes its own course. We are trying our best to work with them and, in turn, the response is quite encouraging. We hope that maybe in the next few years, the response will increase greatly.

Agriculture in Nepal stands, at present, on the threshold of a new era. We are struggling for its development and betterment. The present political situation of Nepal is absolutely favorable to us and has come forth by the best wishes of His Majesty, supported by the great people of Nepal. We shall be comming in closer and closer contact with the rural people with whom our Agriculture Extension program is concerned.

# DO WE PLAN WITH OR FOR THE PEOPLE?

Address by Mr. Wajeh Maalouf
Chief, Agricultural Extension Service
Ministry of Agriculture, Lebanon

Extension work today is one of the main projects of all governments interested in the development of agriculture, the improvement of economic conditions in rural areas, and the welfare of farm people. The continuous and fast changes of all life aspects, in our days made this type of work a very important one, in order to keep the majority of our people, the farmers, pushing ahead equally with other groups towards a better and more satisfactory life condition.

The first question which arises as we proceed in extension is: Do we need to plan a program? In answering this question, we may give some light on the main subject: How shall we plan an extension program?

In all countries represented here, extension work is mainly the responsibility of governments. The extension worker is the government agent, working somehow informally with people, but always within the framework of general government policy. He has to have a written statement to be taken into consideration by both the government and the public. The statement that we call "program" will be his guide in separating the important from the incidental problems, evaluating progress, keeping continuity to achieve the desired objective, and giving light on what he is doing and why. The extension worker can go back at any time to his program to know what part of the work has been achieved and what part remains to be done. This statement determines the responsibility of extension worker, farmers, specialists, and other people who participate in the execution of the work.

The extension worker, whether he is an agriculturist, community development worker, or home economist, in order to fulfil the objectives of extension work, has to function differently from a technical advisor who gives answers and solutions to problems and needs felt by farm people, provides personnel services, and tackles day-by-day problems. The extension worker is called to carry on more responsibilities and do more fruitful work leading to the development of his area and the improvement of life conditions of his people.

To achieve the objectives of extension work, and for the various reasons mentioned earlier, a sound program should be prepared, based on understanding of the present situation, covering felt and unfelt needs of people, and taking into consideration the public interest and its ability to adopt new techniques and ideas.

## How Shall We Plan An Extension Program?

We have described above the importance and advantages of having a program in extension work. Now we come to the most important part of our

work: How shall we plan the program? Should an extension worker sit down behind his desk, take his pencil and write the program for his area, using his technical information and his knowledge of the area's conditions? Or should the program come from above, from regional or national level, in which case the extension worker and the people will function only as tools for execution. Experience from other countries advanced in extension work proved to us that the extension program should start from the local level. Information on local conditions and other factors related to people's attitude, manner of living, financial situation, and human power facilities, should be taken into consideration in planning the program.

The extension worker should acquaint himself with the general agricultural, social and economical conditions of his area. He should make job analyses, in cooperation with groups of progressive farmers, of major farm enterprises and various important rural activities, in order to know the standard practice and pick out the important and crucial problems. In the light of this study, improved practices to help solve each problem, will be discussed with concerned people to get them interested and assure their maximum participation in the execution of the work.

To achieve extension's major objectives, increase farm income, develop leadership among farm people, build self-reliance and decision-making, an extension worker should take the steps just mentioned in cooperation with farmers and rural leaders. This is the basic foundation for all fruitful achievements that an extension worker hopes to attain in his work with rural people. Participation of people with the extension worker in studying local conditions, helps him know exactly what their problems are, felt-needs of the majority, the causes of the problems, other problems and needs that people do not recognize and feel clearly, and what has been done by individuals or groups to improve the present situation. The extension agent, by working closely with the people of his area, sharing opinions and experiences, will have better understanding of their ability and capacity to accept new ideas and practices. He also may discover some advanced persons who have already tried, in some way or other, the practices and new methods that he wants to introduce. These progressive individuals will be of great help to the extension worker in disseminating information and making the new practices more easily accepted by the rest of the people.

The participation of people in the preparation and the planning of the program makes the extension worker realize the limits of people's facilities and contributions to the implementation of program. Thus, he plans his work within these limitations to assure the maximum contribution of people concerned.

We often say the majority of our rural people in this part of the world are illiterate and ignorant. What kind of contribution can they offer to program planning? This is a false idea and wrong conception of the rural people. They may be illiterate or have a low elementary education, but this does not prevent them from being intelligent and having valuable experience in their field of work. A good extension worker does not overlook the rural people's intelligence and experience. On the contrary, he should make use of them in carrying out his work. This fact has an important psychological effect on farm people. The consideration of their opinions makes them interested in the work and willing to cooperate in the implementation of the program, feeling that it is their own program prepared for their own benefit.

Planning the extension program with people has other advantages which

contribute to the achievement of the major extension objectives. It provides for:

a. Training people to think for themselves, analyze their own conditions, realize some of their unfelt needs and problems, and to find the necessary solutions.
b. Training leaders and developing leadership among rural people who usually depend on some one else, especially government, to help and take the lead in everything.
c. Continuity of the work which falls mainly on the farmers' shoulders. The extension worker himself is not able to do all the work. The people should learn to take the responsibility of implementing different parts of the program. Thus, their participation in planning the program makes them believe in it, and encourages them to assume responsibilities.
d. Making people feel that they are respected and gently treated, at least in a matter which is of their own interest, especially in countries where regulations, projects, and programs are prepared on high level and imposed on people for execution. This factor is very important in extension work.
e. A democratic procedure, giving a chance to everyone to present his ideas and find his place in the overall program. All extension objectives call for the improvement of rural areas, but experience has taught us that the democratic procedures in carrying out the work is the more fruitful and right way to achieve the aims of extension. It is, no doubt, a slow process, but it is a sound and sure one.

I feel I must mention the other side of our subject of today: Planning for people. We can clearly see from what has been said about planning with the people that planning for the people or, in other words, without people participation is a wrong and impractical procedure for achieving the extension objectives.

I can think of two ways of planning an extension program without people's participation. First, the program might be planned on the national or regional level and passed through the extension worker to be imposed on the people for execution. Second, the extension worker on the local level, with his technical information and training in extension philosophy and methods, may think he is able to see all rural people's problems and needs, and prepare, by himself, a program for the improvement of his area. Once the program is ready at his hands, his main work will be to induce people to adopt and implement it. In both cases, some of the people's needs and wants will be overlooked. Problems, possibilities, and important factors related to the actual situation will not be properly understood, people's opinions and experiences will be neglected, the interest and the belief of the people in the prgoram will not be strong enough to motivate them to take the responsibility of execution.

Suppose an extension worker, after he studied well the tomato plantation in one village in his area, found that the variety used by the farmers of this village is quite productive and good for shipment for long distance. But, being a small sized variety, it does not appeal to the taste of local people. Therefore, the demand for this tomato is low.

The research people have tried a larger sized variety which fits better the local market's needs and assures more profit to the farmers. The village people are more or less satisfied with the little profit they are getting from their tomatoes and are not willing to take the chance to

replace it with another variety. The extension worker makes a program to replace the small variety with the larger one and tries to force it on them by simply telling them that this new variety has proved to be better than the one they plant and therefore they should go ahead and plant it. He makes this program without discussing the matter with the people to sell them the idea first, and without cooperating with them in planning a program for variety change. As a result, he does not succeed in achieving his objectives of raising the farmers' income from tomato growing.

On many occasions people recognize their problems and feel the necessity for solutions, but they hesitate to make any decision involving responsibilities or radical changes. This occurs because they do not have enough knowledge about the proposed change. To achieve a successful extension program, people should be interested in the proposed solutions as much as they are interested in solving the problems. This is achieved only by doing all steps of the work with them.

One might say that rural people usually do not see far enough ahead to agree on future projects for the improvement of their situation. This may be true in general, but they always should be prepared, through discussions and studies, to see the necessity and importance for planning and adopting such programs. Then we may depend on their cooperation and participation in the implementation of the work.

Let us keep with our basic philosophy in extension; we plan <u>with</u> people for their benefit, and we should never plan <u>for</u> them if we really seek success in our work.

## PROGRAM PLANNING

### Summary of Four Discussion Group Reports to General Session

Agricultural Extension Programs should be planned principally from the "bottom-up" but cannot completely exclude some downward planning due to national objectives, and the human and financial resources available to the government. Thus rural people must be involved, as well as people at various levels in government or the private sectors of the economy.

Rural leaders should be involved in program planning because:

1. Local people know their problems better than any one else or can discover them if they are given some guidance in studying the situation.
2. Planning with the village leaders encourages the self-help idea among the rural people.
3. If planning takes place with the local leaders they are more ready to accept responsibility for and believe in the results of any action taken.
4. If such leaders participate they will help interpret the objectives to others and aid in the execution of the program.
5. If planning is done with these leaders, it becomes easier to gain acceptance by the people engaged in Agricultural Extension work.
6. Leaders can help evaluate results of Extension activities.
7. If the leaders are involved better channels of communication can be built up to explain about governmental resources and program objectives and to transmit the problems of the people to the Government.
8. Involving leaders helps to multiply the efforts of the Extension staff to reach more people.
9. Government cannot furnish all the men, material or financial resources to solve the rural problems, thus to secure participation from the villagers in planning and carrying out the Extension program makes possible greater achievements.
10. This involvement of local people helps safeguard the program against deterioration due to changes in government, politics, etc.

Extension workers may of necessity initiate their efforts with established officials but they must learn also to identify and utilize those informal or potential leaders who are looked up to by the people. The Extension worker must bring information and organizational help to any planning situation so the local people can more easily recognize problems, devise solutions, and choose a course of action. Extension subject matter specialists or government agents should be viewed only as sources of information in planning.

Plans expressing the felt-needs of rural people stated in simple terms, with goals that can be attained over a short period of time, will serve best in the early stages of Extension work. The ability to develop more detailed long-range plans progresses with the development of local leaders. Assigning responsibilities and giving recognition to leaders will develop them but some training in conducting discussions, formal meetings, etc. is often necessary to "grass roots" planning.

# EFFECTIVE COMMUNICATIONS IN AGRICULTURAL EXTENSION

Address by Mr. M. G. Kamath
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"Communication" is a word that we are hearing more and more about in recent years in connection with Extension Education. It is a word that Extension Educators are getting familiar with, and yet this is the one word the full meaning of which is yet to be fully appreciated in many quarters and its fullest use in Extension Education yet to be realized.

Communication in Extension involves the transmitting of ideas and information between people. It includes communication between and among individuals, families, villages, organizations and the various areas and parts of the larger society. Since extension aims at the formulation of joint decisions and actions, these should be preceded by the creation of mutual understanding, which can be created only by the communication of facts, ideas, instructions, opinions and feelings. Communication is thus a prerequisite in all activities that involve two or more persons. It is the broad base on which the edifice of extension is built.

## Transmitting Knowledge

For agricultural and rural progress, any country, of course, must have the knowledge that farm people need. This knowledge is being accumulated by our scientists, and much of it will remain in records and on shelves, unless communications can take the knowledge to those who need it.

Communications involve two elements, the sender and the receiver. Communication links up these two in an interacting relationship. This relationship requires a two-way flow of information and ideas between the two so that a common understanding of the purpose, methods and timing of operations can be achieved and maintained.

## The Communication Process

In communicating information to people, these four things require consideration:

The audience, the message, the channel and the treatment.
Each one of them is as important as any other.

### The Audience:

Simple as this factor may look, it is the one that we often fail to determine. Purposeful and effective communication has to take into full account the kind of audience it wants to serve. Just as the problems, the needs, the ability, the skills and their resources vary with different audiences, so will their understanding capacity, their

interests, their learning and retention power also vary. Communications among and for Extension workers or technicians varies from those among villagers. Again, what is good for one set of rural people in one area may not be good or even wanted by others in another area. The communication process therefore, begins with a clear understanding of the audience which it tries to serve.

The Message:

From the technologists' point of view, there is plenty of knowledge to be transmitted to people. While all knowledge is valuable, not all of it is of use or of interest to the average extension audience. It is here that the communicator must choose what precisely is to be communicated, according to the change that is desired, and must select the appropriate message. Many a time, it is our experience that the message problem is so much confused or completely lost because of its being mixed up with a lot more things that the audience is either not interested in, does not need, or cannot understand.

In Extension communication, the person who communicates must be able to collect all the facts about the message that he wants to send out. Quite often, the message is either vague or incomplete, so that the recipient does not have all the facts that he needs to know before he can decide on action, or he is so confused that he does not listen any more to your message.

In a country where the audience is a big mass of people with diverse interests, problems and situations, the communication job becomes all the more complicated. If the Extension worker at the village or block level himself is the communicator, then the message can be trimmed down to the specific needs of the people of the smaller area involved. But when there is a specialized organization catering to everyone's needs over a larger area, through whichs the extension workers receive their communication assistance, the problem becomes a difficult task. Then the message that comes out of the organization has to be not so specific for any particular smaller area, but necessarily of a generalized nature which the extension worker has to use to his advantage by modifying it, or adding to it, so as to make the same appropriate to his situation.

This brings us to another important aspect of communication. Many communications and messages meant for the ultimate emanate from a higher level such as the state or national level. Before such a message is disseminated, it is but right that the Extension worker is made aware of the message and its implications, so that he is fully prepared to do his part in the communication and follow up process, and not taken unaware when a member of the audience confronts him.

The communicator should know the purpose, the content and the usefulness of the message. He has to select the content with care and arrange it properly. The content has to be related to the objective, should be clear and specific, concrete, and accurate. It not only should be appropriate, but should give the receiver just the information he wants regarding the sources of further information or assistance.

The Channel:

The Extension communicator has a large number of channels through which to transmit the message. Word of mouth has been an effective channel of communication through the ages. The Extension worker talks to the farmer. The farmer discusses the same with his family. The village leader transmits the message to his friend. Village groups discuss the message at their meetings. All these effectively communicate the message. But word of mouth has limitations. Only a few people can be contacted this way. Demonstrations - an effective channel of communicating a message or a new idea - have the same limitations. Other channels called mass media are used to communicate with larger numbers of people. These channels are newspapers, farm or rural magazines, radio, exhibits, motion pictures, posters and simple publications such as leaflets and bulletins.

Even in group communications, the communications become more effective when certain communication aids or teaching aids such as blackboards, flannel graphs, charts and graphs, slides and film strips, puppets, motion pictures and models or actual specimens are used. These are used in personal contacts or group meetings to drive home more easily the message to be transmitted.

Mass Media: While each channel or method has its own use, it is the use of all these, or as many of these as are applicable (depending upon the situation) that gets the job done. Mass media help us let the audience know what information is available, and how and when they can make use of it.

Mass media multiply the communications of the individual extension worker; many more people are reached. They help create interest and a receptive mind in the audience, and make the workers' job easier. Moreover, the audience will have to be "exposed" to the idea or message many times before they accept it. The more the channels, the better the exposure, the better the receptivity. Research shows that the biggest percentage of people who accepted new ideas were exposed to 5 to 7 information media. In brief, the more channels you use, the more people you reach, the more times you reach them, the more people you convince, and your demonstrations and personal contacts will be more effective.

Radio Forums: We have been having for the last many years special daily radio broadcasts for rural people from our radio stations. These broadcasts are heard on 100,000 radio sets in our rural areas. We have also installed community listening sets in the rural areas. At present, there are 71,500 of these. One step forward we have taken in this direction is to organize Radio Farm Forums or listening-cum discussion-cum-action groups on the Canadian model, adopted to Indian conditions. At present, there are 2,900 radio farm forums working. We are planning to organize more. A central farm radio service feeds Radio Stations with important information for broadcasts.

Motion Pictures: The production of motion pictures suitable for rural audiences and pinpointing specific aspects of better farming has been given importance in recent years. From the "feature" film angle, we have moved on to motivational, educational motion pictures. Now we are experimenting with short,

slow moving, direct "instructional" movies. The Union Government has formed a pool supported by all states for motion picture production so that movies can be produced based on the felt needs of extension people. We are also moving towards production of movies for specific audiences and relating to specific problems with "local touch". We are moving more towards using films for "education" especially with illiterate or semi-literate audiences, as a part from the purely "entertainment" approach.

Exhibits: Exhibitions are costly, time consuming in production. From the days of exhibits that contained everything in them, we have moved on to "single message" and simple exhibits related to important day-to-day problems. Audience reaction indicates that this kind of exhibit is more effective.

Newspapers and Magazines: We have developed "news" service for our newspapers and magazines that have prominent rural circulation. The definition of "news" has changed considerably among editors who see now that with agricultural news the newspapers serve this rural audience better. We issue on an average of two releases a week to 2,500 newspapers and magazines in the major languages of India.

Wall Newspapers: A fortnightly wall newspaper started three years ago, gave us insight into a very good channel of communication. More pictures and fewer words, seasonal farming hints, success stories, and local news interested the rural audience.

Village Museums: An experiment in organizing a village museum in a central village of a group of villages served as an excellent communication medium. The village had been taken up for intensive agricultural and cooperative development, and we had in this museum materials pertaining to the local farm and home problems of the village. Village youth were trained as demonstrators. The museum cost very little. We used local materials. The village is the center for training seminars and village meetings, and organizers make good use of the museum.

Training in Communications Media: One important block in the communication process is the lack of knowledge in the effective utilization of communication media. Hence we organized information communication workshops cum seminars where practical training in the use of various media was imparted. From the training workshops for state agricultural information units, we took over larger groups to include subject matter specialists, agricultural field officers, and research workers. We found that the higher level people needed also an insight into important aspects of communications. We have moved into training institutions and agricultural colleges so that these could be more appreciative of the roles technicians have to play in the total process of communications. We are organizing also special communication training courses for Home Science trainers and trainees.

Intensive Communication Program: We have taken advantage of the newly started Intensive Agricultural District program (Package Program) for taking up one district for conducting an

intensive communication program. The program has already started, and we hope to learn quite a bit about the efficiency of all media and also to make the district a field training ground for all communication personnel working at state and district level.

Faith In Communications: In using the communication process, the communicator must have an implicit faith in the work he has to do. Unless one is convinced of its efficiency, aware of the proper way of utilizing the communication resources, one will not go far. While this is true of all aspects of Extension work, it is much more true of an effective education process. With faith, we can go a long way with our communications.

Blocks In Communications: There are many interferences in the communication process.

The first is the communication channel. It must be in a functioning condition. Many times that is not true to the extent normally expected.

The second, the time lag. This is one of the biggest enemies of effective communications. Ideas, messages, knowledge, experience - however important they are - become ineffective when communicated beyond the time of effectiveness.

The third is the distortion or confusion of messages. This may be due to language differences, lack of clarity, lack of repetition, sometimes results in misunderstanding in the audience.

The fourth is a block in the distribution channel. What should have reached the audiences remains stacked up midway in some intermediate stage of the distribution machinery. Your audience then is not aware of the information and cannot get it even when it wants to.

The fifth is incomplete information. If the source for further information is not indicated or the economic, or other gains are not clearly brought out, a mental block is created in the audience.

The Treatment:

After the audience is determined, message decided, and appropriate channels selected, the treatment of the message comes in.

The extension audience is not a captive audience. Hence the message must be so treated as to attract the attention of the audience, hold interest, inform and lead to a desire for action.

This requires that the communicator knows the size, the background, the interest of his audience and also other factors such as the level of understanding, and the capacity to retain what is to be communicated.

A message, especially when it is of technical nature, treated in a simple and direct manner is more effectively communicated. Words and pictures have to be logically arranged so as to be meaningful to the reader.

Planning of Communications

Planning is essential in the Communication Program as it is in other programs of extension work. Unless the planning is conducted quite a time ahead, the message cannot reach according to the time schedules and to the volume needed. The Communication process needs thinking and time in the production, transmission and distribution stages. If the program

is not properly planned ahead of time, and in keeping with the Extension programs, it will only create blocks and will not serve its purpose.

Communications is not just one man's job. It is the sum total of the efforts of the men and women concerned with the search for knowledge and the transmission of this knowledge to the appropriate and ultimate audience or recepient. Each person has to contribute to it to the extent one is capable, so that in the final analysis, its recipient reacts in the desired manner.

The expense, trouble, work and worry involved is not small, but it is small in relation to the total expense involved in the rural development process, and the gains are large. The progress of a people embarked on helping itself to reach higher levels of living is always measured in terms of the knowledge it possesses and the knowledge it transmits to the individual and the society. This can only be achieved through purposeful communications vital in Extension Education work.

## THE EFFECTIVE COMMUNICATION PROCESS

### Summary of Four Discussion Group Reports to General Session

The extension agent must understand the social and economic setting of the area in which he works. He should know the educational level of the people, their attitudes, the emotional appeals which motivate them to desire change and take action, their present stage of development and skills, intergroup conflicts, if any, the official and unofficial leaders who really influence people, the major problems and needs, and the existing channels of communication.

The most effective method of education (learning situation) is the simplest one that can be used to teach what you want to teach, preferably a situation in which the audience actually takes part in the demonstration or other learning process. The second best is one in which the audience sees a method applied or a procedure demonstrated and, when possible, the results. The least effective educational method (or learning situation) is one in which the audience merely hears an explanation.

The above principles place a premium on the various kinds of demonstrations, tours, field days, and similar methods. It also emphasizes the necessity of using effective visual aids in meetings, study groups, and other group contacts.

It is recognized that education may require one meeting or demonstration, or it may require a year or several years, depending on the subject and number of people involved. In either case, many different methods - including mass media - will be used, each supplementing the other to make an effective educational program that reaches and interests the maximum number of people.

To be an effective extension worker, the agent needs training in information methods (audio-visuals or communications media) and their use. Specifically, the extension worker needs training to learn:

1. The many communications methods, their purposes and limitations.
2. How to use these methods effectively in different situations.
3. How to produce simple visuals and other information materials in his own office.
4. How to adapt the message to the media and to the audience.
5. Practical understanding of psychology including the importance of careful analysis, or attention to, the elements of communication, i.e., the communicator, the message, treatment of message, channel of communication and the audience.
6. Operation and maintenance of audio-visual equipment used by extension workers.
7. Knowledge of what information materials (including visuals) are available to him and their source, and what he must prepare for himself.

After basic training in communications, continuous in-service training is needed. Like farmers, extension agents "learn by doing", so the

training process should be on a workshop basis and, insofar as possible, take advantage of real-life situations and case problems. Although the training of extension workers in most communications methods is a primary responsibility of the Information staff, it must be a team job with information and subject matter specialists and administrators cooperating. Information specialists cannot do an effective information job at the top level, or help extension workers throughout the organization use communications methods effectively, unless it is the stated policy of the organization to use information methods to help do the extension job.

In his extension work and in planning his use of information methods, the agent should keep in mind that different people are motivated by different things. They may be motivated by one or more of the following: Desire for more income; desire for improved status; desire for better living conditions; desire for prestige, spiritual satisfaction, new experiences, or satisfaction of doing a better job. These and other broad appeals cover most of the many reasons why individuals develop interest, learn new methods, and take action.

In the total extension program, all available and applicable information media should be used by extension workers at all levels to:

1. Let people know information is available;
2. Create interest;
3. Give them facts they can use; and
4. Stimulate them to action.

# COUNTRY REPORT

# AFGHANISTAN

By: Mr. Mohammad Ghufran
Director, Plant Production,
Ministry of Agriculture

## Background

Afghanistan has about thirteen million people, of whom 85 per cent are farmers or have some direct interest in agriculture.

Our Agricultural Extension Organization in the Ministry of Agriculture was established in late 1958. Dr. Ehsan Rafik, who had received special training in France, became Director General of Extension. Omar Khan, who represented Afghanistan at the previous seminar in India, became Extension Director.

## Staff

Three years ago twenty prospective extension workers from Departments of the Ministry and recent graduates of the Kabul Vocational School, received a four week's training course. Twelve were chosen and placed in villages to carry out special projects. By last fall we had sixteen agents in Kabul Province working with American advisors. We placed two agents in two provinces outside of Kabul for the first time.

In recent years, twenty-two old-time Ministry employees in the northern provinces were transferred to Agricultural Extension to handle the Ministry's monopoly interests in cotton and sugar beet production and plant pest control. This winter an additional fifty-one Ministry employees were transferred to Extension to work primarily on a cotton campaign in the northern provinces. They will gradually start other agricultural activities. We now have 104 extension field workers, eight of whom are being promoted to supervisors. Five directors and administrative personnel are at the National Level.

Afghanistan has eight rural development block areas with 117 village level workers. Extension agents or subject matter officers are in eight of the blocks. Some of the blocks also have veterinary assistants and plant protection assistants.

A University of Wyoming contract group under USAID is helping the Ministry of research so that new information can be developed for dissemination by the extension agents.

## Training

We have held in-service training conferences lasting one to three months each year. Seven of our staff have gone to foreign countries to

obtain degrees and three more expect to go during 1962. A new training center is nearing completion on a Ministry demonstration farm near Kabul.

Accomplishments

Extension agents last year helped distribute 150,000 garden transplants grown from improved seed and 600 six-week-old chicks of American poultry breeds. Our agents advised with farmers about many different problems. Three years ago our agents started demonstrations using sulfur for control of mildew on grapes. Now a high percentage of our grape growers buy sulfur. Extension has introduced Buffalo Alfalfa and demonstrated the value of using commercial fertilizers. Nineteen fruit farmers were trained to act as leaders and demonstrators in pruning and other good orchard practices. Mechanized farming demonstrations in the northern provinces has led to increased farm mechanization.

Extension agents helped establish 160 wheat variety and fertilizer demonstrations last fall on farms in 30 communities. Follow-up work this spring will include farmers field days. Our information people will help summarize that data, make radio and newspapers announcements, and distribute the information to individual farmers.

# COUNTRY REPORT

## GREECE

By: Athanassios Papaioannos,
Supervisor, Agricultural
Extension Service

N. Spyrou, Extension Agent

The land in Greece is used as follows:

Twenty-seven per cent is cultivated, nineteen per cent is in forest, forty per cent is mountainous pasture of low production and fourteen per cent is rocky non-productive land, road rivers, lakes, etc.

The distribution of farm families according to the acreage of land owned is:

| | |
|---|---|
| Size of farms up to 2.5 acres | 27 per cent |
| Size of farms between 2.5-12.5 acres | 57 per cent |
| Size of farms between 12.5-25.1 acres | 11 per cent |
| Size of farms over 25 acres | 5 per cent |

The population was eight and one-half million in 1961 of which sixty-two per cent was rural.

A typical farmer lives in a mountain area, cultivates cereals, mostly for his own needs, keeps a few animals and may have a few olive and citrus trees or a small vineyard. Some farmers have fruit trees and 350,000 farm families cultivate tobacco. The major agricultural products are: (1) tobacco, (2) wheat, (3) cotton, (4) fruits and vegetables, (5) milk-meat, (6) citrus fruits, and (7) olives.

After World War II, the Greek Ministry of Agriculture's main objective was to meet the most basic need of the Greek people for food to sustain human life.

To attain this objective, the Agricultural Extension Service was established in 1950.

In 1959 a five-year Government program was started to increase the rural income and the standard of living.

The program of the Extension Service includes agriculture, home economics and youth activities. The Extension workers study the situation and plan a comprehensive program to get the information and technical studies from the Research Institutions to the farm families. New methods have been adopted and farmers have shown progress year by year.

Volunteer leaders have been recruited and large numbers of social groups and economic organizations have joined with the Extension Service to train the rural people.

Under the Minister of Agriculture is the Director of the Agricultural Extension Service. Under this Director there are four sections with the following responsibilities:

1. To train adult persons and to plan National Programs.
2. To train young persons in the Agricultural schools and those not in schools.
3. To train women and girls in home economics.
4. To conduct the communications program of the Extension Service.

There are twenty subject matter specialists headquartered in the capital.

Greece is divided into ten inspectorates each with one Supervisor of Country Agents, one Supervisor of the Home Agents and two to three subject matter specialists. The ten inspectorates have thirty-two specialists.

Each inspectorate includes from five to six districts. Each district includes from five to fifteen countries (2500 to 3000 families).

Greece has ten inspectorates, fifty-three districts with fifty-three Extension Chiefs, 400 Country Agents, 200 Home Demonstration Agents, and 6,000 villages. In each community, or village area there is a Rural Committee working with the Extension Agents.

Greece has 800 4H clubs with a membership of 32,000 boys and girls.

Greece now has twelve Vocational Agricultural Schools. Ten new ones will start soon, and in the next five years forty-three more will be completed, making one in each district. All of these Vocational Agricultural Schools will be under the Extension Service.

The most important thing in the Extension Organization is that the people participate in program planning, execution, and evaluation. Many volunteer leaders guide the people in the job of helping themselves. As a result, Greece now meets the needs of its people for food and exports, products worth more than 210,000,000 U.S. dollars.

The major problems of Extension Workers are lack of transportation, and low salaries.

# COUNTRY REPORT

## INDIA

By: Mr. Y. N. Varma
Extension Commissioner

Agriculture is of pivotal importance in India's economy, providing livelihood to about seventy per cent of the country's population of 430 million and contributing about fifty per cent of the National Income. From about 380 million acres of the cultivated area come the bulk of food supplies and raw materials for a number of important industries.

The Community Development movement and a national Extension Service, entirely devoted to the development of the rural areas, came into being in 1952.

To effect coordinated action by the various ministries of the Government, the Ministry of Community Development was created and was given the necessary responsibilities. This Ministry assists the states of the Indian Union in implementing planned programs.

In each state, community development was initiated in areas called Blocks. Each Block covers roughly 100 villages with a population of about 60,000 to 100,000. The Block is in charge of a Block Development Officer assisted by a team of subject-matter specialists, one each in agriculture, animal husbandry, cooperation, panchayats, public health, and so on. In each Block a Village Level Extension Worker is appointed to look after ten villages with a total population of 6,000 to 10,000 people. Also two village level women Extension workers are engaged on home economics in each Block. The Village Extension Workers are guided by the subject-matter specialists in each Block.

A Directorate of Extension in the Ministry of Agriculture was setup by the Union Government in 1958 to look after the auxiliary but important aspects of Agricultural Development through the Extension Services. The Directorate has four technical units -- Farm Advisory Unit, Farm Information Unit, Package Program Unit, and Extension Training Unit.

In 1952 we set up five Extension Training Centers. Today, we have 100 integrated training institutions functioning. The duration of training has changed from six months in the early years to the present two years. Already 43,000 have been trained. By 1963, over 50,000 Village Level Workers needed by the country will have been trained.

Extension workers who have put in three or four years of service are given inservice training in twenty-four selected training institutions.

The women Extension workers at the village level are trained in forty-three Home Science wings attached to the Extension Training Institutions. About 3,000 have been trained and 1,000 are under training. So far other training activities include subject matter refresher training, training of Extension trainers, and Extension courses for graduate level studies.

For the training of Principals and instructors, we have now established three Extension Education Institutes.

To develop the Youth Program, each Training Center has organized ten pilot youth clubs, including two Mahila Mandals (women's clubs), around the Training Center. Thus far, it has been possible to organize 750 youth clubs, including Mahila Mandals with a total membership of 16,689.

With the need for training Extension workers in the youth program, plans have been made to conduct eighty Regional Seminars on Youth Training during the Third Five Year Plan period, in which 3,000 persons are expected to receive intensive training.

To foster leader participation in development work, a program of training village leaders was taken up on a systematic basis and about 250,000 village leaders or Gram Sahayaks attended training camps organized thoughout the country in the development blocks.

A program for training 250,000 selected progressive farmers has been drawn up under which they will be given intensive training in Agriculture for a fortnight or so at selected Extension Training Centers, Basic Agriculture Schools, and Agricultural Colleges. Various regional and national conferences have been held to review the progress of the program and to formulate policies for the future.

Today, the National Extension Service covers 3,600 Community Development Blocks, serves 370,000 villages, and embraces more than 200 million persons. 3,000 Block Development Officers, 35,000 village level workers, in addition to 20,000 extension officers in various subject-matter fields are working for community development.

Another recent development, vital to community development, is the democratic decentralization through the establishment of elected village organizations called panchayats. This already has been introduced in six of the fifteen states.

India has set higher goals in production and standards of living for the next few years. The experience of the last ten years in Extension, gives us a very strong hope that if, alongside the national efforts in other directions, we keep up the present tempo at which the Extension Services are working, we can reach these national goals.

COUNTRY REPORT

LEBANON

By: Mr. Wajeh Maalouf
Chief, Agricultural Extension Service

This report covers briefly the past and present situation relative to Agricultural Extension work in Lebanon.

Previous to December 1959, we had a section for Agricultural Extension headed by an agricultural engineer. Under him, there were about nineteen technical assistants working as extension agents in nineteen agricultural centers in the country. These agents lacked training in Extension's philosophy, methods, and procedures; and they had no means of travel.

In December 1959, Agricultural Extension was combined with Agricultural Education under one section; the Section of Agricultural Education and Extension. No posts for agricultural engineers or specialists were provided for Extension.

Under this crippled organization (with regard to Extension) we had to start developing an Extension program, taking as first steps the recruitment and training of personnel.

The first training course was held in January 1961. All Ministry technicians and assistants attended this ten-day course. Twenty-two assistants were nominated as extension agents in the districts. This training course was followed by a three-day workshop held in June. Immediately after this workshop ten Extension agents were launched in their work. The plan of work for each agent was as follows:

1. Make preliminary list of up to eight villages in which to start Extension work.
2. Setup a weekly schedule of visits.
3. Gather general information, prepare a job analysis of major enterprises, select a few improved practices, and prepare a plan for work. Each man was given a special form for recording work accomplished and for use in preparing a weekly report.

Present Situation:

In December 1961, a Decree Law was passed providing for the reorganization of the Ministry of Agriculture and the creation of a special section of Extension. Three posts of agricultural engineers were created for the head of the section and for the two divisions of program and training, and information. In addition, three posts for technical assistants and two posts for visual aids specialists were also created.

In the regional services the new organization provides for forty-four local extension workers, four Extension engineers for supervision of the

four regional services, thirty-nine technicians in forestry, veterinary, livestock production, horticulture, farm crops, and plant protection. One of their responsibilities is to function as Extension subject matter specialists.

Training Schedule for 1962:

Three technical training workshops for the Extension workers were planned for 1962. The first training workshop was held last January. The two other workshops were scheduled for April and June. An annual meeting is scheduled for September to evaluate the work and discuss the program for next year.

Difficulties:

Transportation has been one of the major difficulties in carrying on Extension programs. This problem was finally and happily solved by a decision taken recently allowing the Ministry of Agriculture to pay transportation fees on a kilometer basis.

By special decree a 25 per cent increase in their salary was provided (in the form of house rent) to encourage the Extension workers to live in the Extension centers out in the rural areas.

Integration:

A memorandum is being circulated to the heads of central and regional offices describing the procedures to be followed in developing the field Extension program, classifying the administrative and supervisory responsibilities, as well as the procedures by which the various divisions of the Ministry and their subject matter specialists should cooperate in planning and implementing the extension program.

The Extension program is developing on a sound basis and it will soon cover all the areas of Lebanon.

# COUNTRY REPORT

## LIBYA

By: Mr. Munir Ba'aba
Director General
Ministry of Agriculture

Libya has been an independent country for only ten years and much therefore remains to be done to develop an effective educational service in agriculture and home economics.

Libya has a population of about 1,700,000 people with a substantial part of this population living as nomads. It is estimated that about 20 per cent of the people live in the cities and the rest are rural people. The major agricultural products of Libya include wool, olives, barley, wheat and livestock (sheep and goats).

There has been Agricultural Extension activities in Libya since 1951. Most of these activities have been well planned and executed, but have been conducted on the village, district and provincial levels with very little coordination between the provinces. The reasons for the lack of coordination are:

a. There had not been organized a Federal Ministry of Agriculture until very recently.
b. Legislation for the development of a national agricultural Exten- Service has not been enacted. With the establishment of a Federal Ministry of Agriculture, there is now being established a Federal Office of Agricultural Extension and Home Economics. Legislation is being prepared which will give the Agricultural Extension Service a legal basis.

In Libya, there are at present seventy-eight Agricultural Extension Agents. There are fourteen inspectors working on the district level, one Provincial Youth Leader and two provincial chiefs of Extension.

In crop improvement, major emphasis is being placed upon increased production of wheat and barley, forage crops, home gardens, market vegetables and farm wood lots. In horticulture, important work is being done in the rehabilitation of olive and date plantations.

Projects for boys and girls are being conducted with rabbits, bees and gardens. There are 430 members and each has an individual project.

A very limited beginning was made in Home Economics work with village women. Activities in this field of work during 1961 were carried on at the village level and were well accepted.

Some progress has been made in developing activity or program leadership on the Provincial level. In Cyrenaica we now have a Libyan leader of the Youth Program, but leadership is still needed in other important areas of Agricultural Extension work. Previously, considerable reliance has been placed upon technicians of USAID and FAO for program guidance

and leadership. Efforts are being made to develop effective leadership among Libyans.

Emphasis is to be placed upon the training of Agricultural Extension personnel. In each of the three provinces, intensive in-service training programs are being planned for this year and 1963. In addition, some out-of-country training is being planned for next year.

What are our objectives for the future? The primary objective is to develop a Libyan Agricultural Extension Service which is organized and trained so that it can function effectively without foreign assistance.

The agriculturaal leaders of Libya are committed to the proposition that Libya shall have an Agricultural Extension Service to work with farm people helping them to achieve a better and more abundant way of life.

## COUNTRY REPORT

## NEPAL

By: Mr. Akrur Narsingh Rana
Chief, Extension Service

In the Himalayan Kingdom of Nepal, the main occupation of the people is agriculture. More than 90 per cent of the 8.6 million people derive their living from farming. The total crop area is more than 11.8 million acres, half of which is paddy. Other major crops are maize, millet, wheat, potato, pulses, mustard, jute, and sugarcane. Many types of temperate, tropical, and sub-tropical fruits are grown in Nepal but oranges are most famous. It is estimated that only 20 per cent of the harvested land produces more than one crop annually.

About one million holdings in the country are too small to utilize fully the labor potential of the family, and are therefore, inadequate for family maintenance. The laws of inheritance of property are the main cause of this fragmentation of holdings.

Nepal had been living in isolation for the last few centuries. Only in 1951, with special efforts of the late King Tribhuban, the father of His Majesty, it became a democratic country. Immediately after this, the village Development Department was established in Nepal with the joint efforts of His Majesty's Government of Nepal and United States Agency for International Development. It has two major divisions of work; training and field services. In training, there are three institutes including one for Home Agents. At the village level, there are more than 700 village development workers distributed. in fifty-five Development Areas. In Home Science, there are ninety-four agents who work in thirty-five centers. In the 4-Leaf program, which is similar to the 4-H program in the United States, there are nineteen full time rural youth workers. They have organized 310 4-Leaf clubs with a membership of 3350 boys and girls. Main projects are poultry, goats, sheep, vegetable gardening, foods, and home sanitation.

Realizing the scarcity of land on one hand and the growing need of the agricultural development of the country on the other, in 1959-1960 a separate wing of Agriculture Extension under the Department of Agriculture, was established. The whole country is now divided into fourteen zones and seventy-five development districts. In the district level two or three Junior Technical Assistants (J.T.A's) work after acquiring one year's training in the School of Agriculture in specific fields like agronomy, horticulture, livestock, veterinary, and irrigation. Now there are 106 J.T.A's covering forty-nine districts. Five zonal Extension Offices were established this year for the technical supervision and on-the-job training of J.T.A's. At the national level, there are five subject matter specialists. This year an audio-visual program is to be added. The strenth of specialists will be increased gradually as the

work develops.

His Majesty's Government has recently announced the draft of a three year plan, for the country. The total outlay of the plan is 586 million rupees starting in 1962-1963. The plan gives top priority to transport, communication, and hydro-electric projects followed by industry and agriculture. In the three year plan period, the extension program will extend over the country with proper staffing in Agriculture, Home Science, and youth activities in all three levels i.e. national, zonal and district.

The progress of Extension work in such a short span of time, is conspicuous. Better seeds of paddy, wheat, maize, vegetables, together with improved implements, fruits, livestock and poultry have already been introduced in rural areas. Improved cultural practices, such as manuring and the use of insecticides and fungicides have become accepted practices. The program is gaining wide acceptance and is directed towards "helping villagers to help themselves." Whatever Extension work has achieved in Nepal, there is still rooms for improvement. A few of the major problems are:

1. Land tenure system. The farmers do not own the land.
2. Trained Agricultural Agents and specialists are in short supply. Generalized training in Agriculture does not help Extension agents in their specific working areas due to wide variations in the agricultural areas of the country.
3. Lack of credit and marketing facilities for farmers.
4. Lack of sufficient supply agencies for insecticides, fertilizers, agricultural equipment, etc.
5. Lack of good roads and transport.
6. Inadequate research findings.

His Majesty's Government is aware of these problems and believes that the Agricultural Extension Service can help solve them. With these many problems facing Nepal it is wise to remember "Rome was not built in a day."

# COUNTRY REPORT

## EAST PAKISTAN

By: Mr. S. E. Patwari
Deputy Director,
Agricultural Extension Service

East Pakistan covers an area of about 55,000 square miles of which 22,000,000 acres are cultivated. The population is 52,000,000 with about two per cent growth per annum. The density of population is about 960 persons per square mile. About 85 per cent of the population of East Pakistan lives in rural areas and are directly or indirectly dependent on agriculture.

Major crops grown in East Pakistan are rice, jute, sugar cane, tobacco, mustard and pulses. Among fruits grown, pineapple, banana, mango, lichi, papaya, and oranges are the most important. Many kinds of summer and winter vegetables are grown.

To solve the problems of the rural economy, Agricultural Extension and allied services of the province are organized under the Department (Ministry) of Agriculture into six Directorates: Agriculture, Livestock Services, Fisheries, Agricultural Marketing, Cooperatives and Credit and Forestry. The Agricultural Directorate is by far the largest of the six and has an Extension staff at the lowest level, (i.e. Union as shown in the diagram appended). Other Directorates have field staffs up to subdivision or Thana levels. The Extension activities of all the Directorates are therefore coordinated at the Thana level and channeled through the Union Agricultural Assistant.

Since 1961-62 the business of supply and services has been separated from the Extension services and entrusted to a semi-autonomous body, called the Agricultural Development Corporation, so that the Extension workers can devote full time to Extension education.

In the past, the extension program was built from the top on the supposedly felt needs of the people as experienced by the extension workers in their day-to-day work. Rural people were not directly involved in building programs. Consequently reponse from the rural people was not so marked as anticipated. The people like to shape their own destiny. Unless they do tangible and lasting results cannot be expected. Recently we have started building programs from the bottom in collaboration with the people through Union Agricultural Development Committees and village planning committees. This procedure is in the process of being introduced in the provinces.

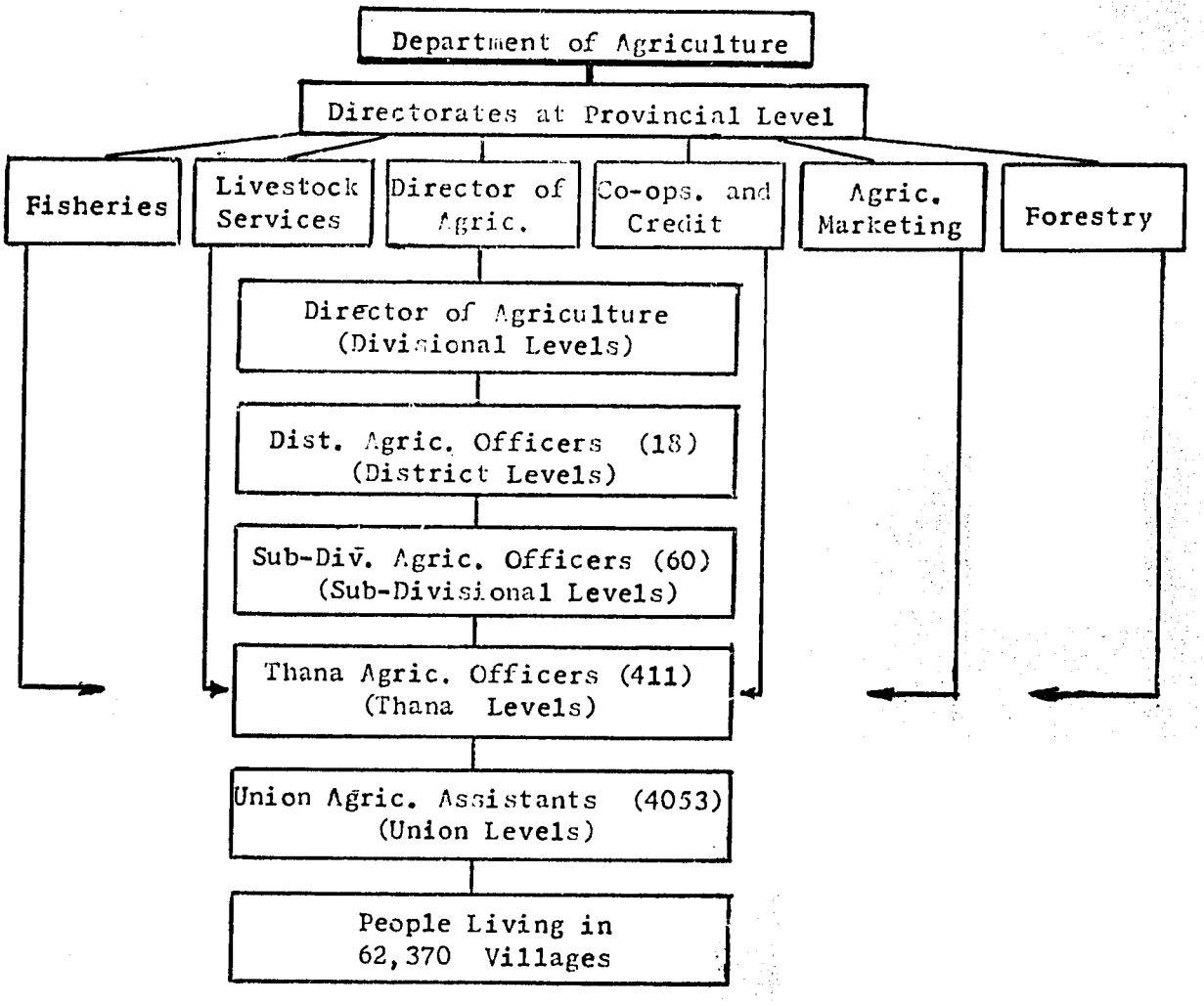
All the modern Extension methods are used in teaching the rural people. Greater emphasis is however laid on method and result demonstrations, which have been proved most successful in gaining participation of the rural people.

We have an Agricultural Information Service under the Department of Agriculture, for processing Extension education materials for all the Directorates. It is organized under a chief technical information officer, who is assisted by information officers drawn from all the Directorates.

To be most effective the extension workers must be kept abreast of up-to-date factual information about improved production processes. There are provisions for monthly training of the Union Agricultural Assistants and Thana Agricultural Officers at the Thana and sub-divisional levels to refresh their knowledge of improved production processes that they are expected to teach to the rural people during the following month. Periodical seminars are also held at all levels.

To support the Extension services we have necessary provisions for Agricultural Research. For Agricultural education we have one Agricultural University, one Agricultural College, one Cooperative College, one Forestry College and three Agricultural Schools. Very recently seven training institutes of the terminated V-AID organization have been placed under the control of the Agricultural Extension Services. These institutes along with the three agricultural schools will now be utilized for a more thorough pre-service and in-service training of the Thana Agricultural Officers and the Union Agricultural Assistant.

Organization Chart



# COUNTRY REPORT

# WEST PAKISTAN

By: Dr. Abdul Aziz Khan
Deputy Director,
Agricultural Extension
Service

The population of West Pakistan is 40.8 million. Total area is 198 million acres, of which 39.9 million are cultivated and twenty-seven million are irrigated. Cultivator holdings total 3.75 million and average 6.8 acres. Eighty-five per cent of the population depends on agriculture. Sixty per cent of the national income and ninety-five per cent of the foreign exchange earnings come from agriculture. Almost all kinds of crops, vegetables, and fruits are cultivated. Food grain production is 5.813 million tons, cotton 1.65 million bales, and sugar cane 11.5 million tons.

The Agricultural Extension Organization includes fifty-seven officers and sixty-one subject matter specialists at provincial, divisional and district levels and 1,170 field extension workers. In addition, 1,755 extension employees are assigned to plant protection work.

Achievements:

a. Nine-hundred and twenty-eight thousand maunds of pure seed of various crops were supplied to plant 3 million acres and 532,000 fruit trees of recommended varieties were distributed for planting 6,000 acres.
b. One-hundred sixty-thousand tons of fertilizer were distributed through 1,400 agencies, and applied to two and a half million acres.
c. Plant protection work was carried out on 4.6 million acres.
d. Tractors were used to reclaim 115,000 acres of new land. One hundred twenty-five surface wells and 182 tube wells were installed, bringing 20,000 acres under perennial irrigation.

Education of the farmers in improved agricultural practices was done on an extensive scale through all the known methods of agricultural Extension. This included writing 102 new leaflets, revising 122, and distributing 240,000 copies. Meetings totaled 301,666 in addition to 1224 agricultural film showings and 194 agricultural exhibitions.

About 80,000 fruit trees of outstanding merit were worked and 25,808 fruit trees of inferior quality were top worked; 6,350 demonstrations in budding and 38,980 in pruning, training, and manuring were given and 4,860 fruit orchards were laid out. To demonstrate improved agricultural practices, 7,202 demonstration plots were laid out, including maximum potential plots in the fields of individual cultivators, in blocks covering general

holdings, in model private farms, and in model villages. Five thousand demonstrations of furrow turning ploughs, 50,000 on the use of cotton drills and 15,000 on the use of cultivators for new crop interculture were given. Crop competitions were held and fruit shows organized at provincial and divisional levels and 284 short courses in fruit and vegetable preservation benefited 4,925 persons including 2,641 women.

Agricultural Research supports the Extension program and a fully integrated Information Service with liaison personnel in all divisions of the Secretariat has been reorganized recently, after transfer from the recently terminated Village Aid Program. The Secretariat is moving toward a fully integrated Extension Service. The present Extension Service (formerly serving only soils and crops) now is responsible for Animal Husbandry Extension and the Forestry Division is asking for a similar service. These divisions will provide specialists and training in the respective fields for the present and future staff. An Extension Division separately administered under the Secretariat but tied to the technical divisions for training and information may soon become an actuality.

# COUNTRY REPORT

# TURKEY

By: Mr. Ahmad Elgin
Extension Advisor

## The General Background

In spite of Turkey's industrial development, it is still basically an agricultural country. Three-fourth of the twenty-seven million people are engaged in agriculture, 45 per cent of the gross national product comes from agriculture, and more than 85 per cent of total exports are agricultural products.

Thirty per cent of its total area is arable, 40 per cent is grassland and pasture and about 13.5 per cent is forest.

Because of its vast area and its geographical and topographical features, Turkey has a varied climate and can grow many different crops. The major agricultural products are: cotton, tobacco, wheat, nuts, rice, sugar, beets, potatoes, olives, figs, grapes and citrus.

General farming prevails throughout the country. Total of agricultural holdings number about 2.5 million, 84 per cent of which are under twenty-five acres in size, 14 per cent between 25 and 125 acres and only 2 per cent more than 125 acres. In most villages the holdings are split in several parcels scattered over a wide area.

## Organization

The Technical Agricultural Organization (Extension Service) has been established according to a law that came into force in 1943. It is in the General Directorate of Agriculture which is one of the nine General Directorates of the Ministry of Agriculture: (1) Agriculture, (2) Veterinary, (3) Forestry, (4) State Farms, (5) Agriculture Supply, (6) Meteorology, (7) Soil Conservation and Irrigation, (8) Plant Protection and Plant Quarantine and (9) Mixed Feed Industry.

Turkey is divided into sixty-seven provinces, 630 counties and has about 44,000 villages.

The Extension Service started in three provinces in 1954 and every year five to ten provinces have been added to the program. In spite of its many difficulties, the Extension Service has already been established in sixty-six of the sixty-seven provinces. In every province, there is one Extension Director (Technical Agricultural Director), one Assistant Director and five to ten Subject Matter Specialists according to the agricultural character of the province. Each province has approximately ten counties and in each there is one county agent.

This organization was active only in the training of farmers until 1954 when work with farm women (Home Economics) was undertaken. In 1957, rural youth (4-K) was included in the program. A Technical Information

Section was setup within the General Directorate of Agriculture four years ago.

At present, the Extension Service has 1,300 field workers outside national headquarters including ninety-three Home Economists, 300 county agents, and sixty provincial 4-K leaders.

Major Needs of Extension Workers

a. More information from research.
b. More in-service training.
c. More leadership.
d. Sufficient transportation.
e. Higher salaries.
f. Elimination of regulatory work from Extension Service.
g. More adequate and comprehensive program planning.
h. More coordination and cooperation.
i. A reorganized Extension Service.

Major Points of Emphasis in Extension Program

a. Pre-service and in-service training.
b. Local leader training.
c. Increasing in the number of village extension committees.
d. Establishment of more 4 K clubs.
e. Building of twenty-eight training centers for farmers and a new training center for Extension Workers.
f. Increased effectiveness of the Information Section and furnishing of the organization with visual aid materials, equipment, and publications.
g. Improvement of the leadership in the center office.

Future Plans

The Ministry of Agriculture presented a new Extension Law which is still pending. We feel that this new law will give us a greater opportunity:

a. To create regional organizations.
b. To increase effectiveness of our major points of emphasis in the Extension Program (Paragraph IV).
c. To solve most of the above problems. (Paragraph II).
d. To furnish the organization with 3,000 extension workers and about 2,000 vehicles.

# COUNTRY REPORT

## JORDAN

By: Mr. Khalid Haj Hassan,
Director, Rural Development Department
and
Miss Aida Zahran,
Chief, Home Economics,
Rural Development Department

Jordan's population is one and three quarters million, 70 per cent of whom are rural people depending primarily on agriculture for their living. The agriculture of Jordan constitutes the largest part of Jordan's national income.

Its area is 96,000 square kilometers, about 15 per cent being good cultivable land while the other 85 per cent consists of desert and mountainous areas. Its elevation varies from 390 meters below sea level to 1500 meters above.

This report summarizes the accomplishments since the last seminar in New Delhi in 1960, a statement of the most outstanding problems, and a glimpse of our future plans.

In July 1961, the Agricultural Extension Service and the Community Development Project were amalgamated into one Department under the Ministry of Agriculture. This Department is now known as the Rural Development Department (R.D.D.) which includes agriculture, home economics, youth, and community type projects.

The RDD is designed to solve the problems of the rural people by helping them help themselves, individually, and as communities. It aims at coordinating the total resources of the Government and the people for a concerted and determined effort to improve rural life in Jordan.

The general objectives of the program are:

1. To raise the productivity and standard of living of the rural people by bringing to them modern techniques of farming and family living, including home economics, sanitation and health, and assisting them to obtain other services related to their betterment such as education, cooperatives, etc.
2. To develop a spirit of self-help, initiative, leadership, and cooperation among rural people.
3. To develop conditions for a richer and higher life through social activities, including recreational facilities, for men, women and children.

In order that the program may be based on a solid foundation, it is important that local leadership in the rural communities should be found and developed, and that the rural people should be encouraged to work

together. It is a fundamental concept of the RDD that planning of all development work should be carried out at the local level and should be based on the actual and expressed needs of the people.

The RDD utilizes multipurpose male and female local agents and development supervisors. Each local agent is trained in the human relations and manipulated skills with emphasis on agriculture or Home Economics.

Each local agent is posted wherever possible in an area of seven to ten villages. The agent's task is to assist the rural people in defining their needs, developing and executing plans to meet these needs, and in evaluating the results.

It is evident that the local agent is the key to the program. The basic organizational structure of the RDD is designed to train him and to support his activities in his assigned area.

RDD is in the charge of a Director who is assisted by three Division Heads as follows:

1. Operations and Administration Division:

   This division is in charge of all field operations and field personnel. The personnel presently consists of fourteen Development Supervisors, who are responsible through the District Inspectors to the Director of RDD, four District Home Agents, 109 Village Agents, and sixteen Home Agents, and Supporting Staff. This division is also responsible for the administration of the Headquarters office in Amman and for payrolling all RDD personnel.
2. Technical Division:

   This division consists of the specialists as setup in the various subject-matter fields, the audio-visual section including the mobile cinema units, and the training staff at the Beit Hanina training Center. This division acts as the advisory group to the RDD Director, and the Operations and Administration Division Head. It also conducts the many short courses and other in-service training courses required to keep the staff qualified in all respects for their work.
3. Home Economics Division:

   This division is headed by a home economics chief who is responsible for all home economics' activities with full cooperation with the technical and administrative divisions.

**Problems:**

1. The training program needs to be supplemented with experienced trainees.
2. Workers with no agricultural background should be trained in agriculture and those with an agricultural background should be trained in more advanced phases of the work.
3. Lack of transportation is a chronic problem and is a great hinderance in the achievement of our objectives.
4. The small number and rapid turnover of home economics personnel.
5. The absence of a home economics vocational school or Junior College within the country from which trained home economics workers can be recruited.

**Future Plans:**

1. Strengthen the administration of the youth program and establish

a variety of educational projects for youth.

2. Increase the number of home agents to about thirty-five and provide them with the necessary training to carry on an effective program.
3. Establish annual contests and fairs for youth members to develop a healthy copetitive spirit.
4. To up-grade the educational level of all extension employees utilizing every available possibility in on-the-job training, or out-of-country training.

We hope that in our next seminar we can report the achievements of most of the plans that we have stated.

## RESOLUTIONS

The following resolutions were adopted at the closing session of the Seminar:

I. It is recommended that similar seminars be continued once every two years.

II. It is recommended that delegations from participating countries should include representatives from Directorates of Extension, Home Economics personnel, Youth Workers, Information Specialists and Top Level Administrators related to Extension. This should not exclude related agencies representation (cooperatives, etc.)

III. The Seminar re-emphasizes the recommendations of the Third Regional Seminar regarding the establishment of a regional training center for Extension personnel. The resources of this training center should be made available for short term training depending upon the request of individual countries. It is implied that the training offered would cover all fields of Extension activities. It is also recommended that the proposed regional training center have an office or officer to provide a clearing house of information for program activities between and among countries.

IV. It is recommended that Extension workers be sent on educational observation tours to countries within the region of N.E.S.A.

V. It is recommended that these seminars should include workshop procedures. Experts on the particular subjects should be at hand.

VI. It is also recommended that youth exchange programs be inaugurated within the countries of the region.

VII. It is recommended that FAO and AID cooperate to avoid duplication in sponsoring seminars.

VIII. It is proposed that the participants gratefully extend their vote of thanks to His Majesty, King Hussein of Jordan, for the honor of His Royal patronage for the Seminar; His Excellency, the Minister of Agriculture; the Government of Jordan, the host country; the Municipalities of Nablus, Jerusalem, Bethlehem, Beit Jala, Beit Sahour, Ramallah and Bireh, Hebron and Jericho; the very many officials and non officials of Jordan and the USAID/Jordan, all of whom worked so hard to make this Seminar a success.

IX. The Seminar participants also greatly appreciate the support given by the Agency for International Development, Washington, D.C., as sponsor of the regional seminar.

## EVALUATION OF THE SEMINAR

The Chairman of the Executive Committee appointed a committee to evaluate the seminar and make constructive suggestions for future Extension seminars that might be held in the region. A questionnaire was prepared and circulated to advisors and participants. The questions and a summary of the answers to each question follows:

I. Should another Seminar be held, if so, when, and where?

Nearly everyone agreed another seminar should be held in two years. Greece, Turkey and Lebanon are preferred sites for the next seminar in the order mentioned.

II. How many days would you suggest?

Ninety per cent suggested 10 to 12 days.

III. What major subjects would you suggest for the next seminar?

Suggested subjects were: (1) How Extension and research working together serve people; (2) Evaluation of programs and personnel; (3) Selecting and training Extension employees; (4) Use of specialists in Extension work; (5) Extension organization; (6) Coordination of Extension Programs with other agencies; and (7) The role of Home Economics and Youth Work in Agricultural Extension Programs.

IV. Who should attend a NESA Agricultural Extension Seminar?

More than eighty per cent suggested that Extension Directors or Administrators should attend and also a representative from the office of the Minister of Agriculture.

Others suggested were; Heads of Research Departments and specialists, Home Economists, and Youth Workers in Agricultural Extension.

V. Has the Seminar been useful, and how?

Ninety-nine per cent answered yes to this question and in the following ways: through participation in the group discussions they were able to exchange ideas on how problems were being solved in other countries. Many participants mentioned they gained confidence in their own programs.

VI. How can Country Reports be handled to be more useful to participants?

Ninety-six per cent answered by saying the host country should send to each participating country a suggested outline for the report. It was suggested that the reports be less than thirty minutes in length.

VII. Did you like discussion groups, and how can they be improved?

Ninety-nine per cent answered "yes". They said these groups provided an opportunity for each person to express himself and added informality to the seminar.

They suggested the following to make the discussion groups more useful in the future: Carefully select the chairman and give him some guidance before the groups convene so he will prevent one person from dominating the discussion and encourage all to participate and keep the group on the dicsussion topic. Select places for group meetings that are comfortable, convenient and have necessary facilities.

VIII. Did you like field trips and what did you gain from them?

Everybody said they liked the field trips. Many participants said they benefited from seeing: (1) Extension in action, (2) how the Extension workers were working with village people and (3) how the community was working together for the benefit of all the people. Many said this is the only opportunity they had to talk with the farm families.

IX. Do you want more time for general sessions?

The participants were divided equally on this question.

X. What part of the program did you like best?

The answer to this question in general was, "I liked the total program".

The tours and discussion groups were mentioned most frequently in their answers. They felt that the opening address by Dr. E. T. York was very inspiring and set the direction and tone of the seminar.

XI. What part of program did you like least?

Following are some of the answers: (1) Country reports were too long, (2) the hotel should have been nearer the city, (3) places for group discussions could have been better arranged, (4) hotel prices were too high ($7.00 per day for room and meals), (5) some field trips were too long.

Such comments, however, were not general.

XII. What part of the program will help you most in Extension work back in your country?

Most everyone said the entire program was good, and and would be helpful back in his country. Cited by some were field trips,

group discussions, and talking with people from other countries as being the most helpful.

XIII. Should we have country exhibits, and, if so, what kind?

Ninety per cent said yes. Suggestions were made that the exhibits be restricted to Extension teaching aids, printed material and charts. It further was suggested that the host country send to each country an outline to follow in preparing the exhibit well in advance of the time of the seminar.

XIV. Other suggestions.

(1) The host country should keep the other countries informed in advance of all seminar plans and (2) particpating countries should communicate more promptly with the host country so they can make the necessary reservations, etc.

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Dr. R.W. Shoffner
Seminar Coordinator
AID/Washington

## AGENDA OF THE SEMINAR

Sunday, March 18

Arrival and Registration

Monday, March 19

Chairman - Khalid Haj Hassan, Jordan

9:00 - 11:00 a.m. Completion of registration

11:00 - 1:00 p.m. Opening session

Addres of Welcome by His Excellency, Dr. Qassem Rimawi, Minister of Agriculture.

Delegates' Response

Dr. E. T. York, Administrator, Federal Extension Service, U.S.D.A., address, "Extension's Contribution to Agricultural Development and Economic Growth."

1:00 - 3:00 p.m. Seminar objectives, procedures, and schedule. Mr. R. W. Shoffner, Seminar Coordinator.

3:45 - 4:45 Organization of working groups.

4:45 - Meeting of senior delegates of each country with Mr. Shoffner to appoint the Executive Committee.

Tuesday, March 20

Chairman - Mohammad Ghufran, Afghanistan

9:00 - 10:30 a.m. Country reports

Afghanistan
Greece
Jordan

10:30 - 11:00 a.m. Recess

11:00 - 12:00 Noon "What We Are Trying to Do In Agriculture Extension and Why", by. Mr. Aslam Zafar, Deputy Agriculture Development Commissioner, Pakistan.

| | | |
|---|---|---|
| 12:00 - 2:00 | p.m. | Lunch |
| 2:00 - 3:00 | p.m. | Discussion groups |
| 3:00 - 3:15 | | Recess |
| 3:15 - 5:15 | | Discussion groups |

Wednesday, March 21

Chairman - Athanassios Papaioannos, Greece

| | | |
|---|---|---|
| 9:00 - 10:30 | a.m. | Country Reports:<br>Libya<br>Lebanon<br>Nepal |
| 10:30 - 11:00 | a.m. | Recess |
| 11:00 - 12:00 | Noon | Discussion groups |
| 12:00 - 2:00 | p.m. | Lunch |
| 2:00 - 3:30 | p.m. | General session to present group reports |
| 3:30 - 3:45 | p.m. | Recess |
| 3:45 - 5:15 | p.m. | Country Reports:<br>Pakistan<br>Turkey<br>India |

Thursday, March 22

Field trip — Bus 1

"The Extension Family at Work" — Arrabeh Village

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|---|---|---|
| 7:00 | a.m. | Leave Hotel for Nablus District |
| 9:30 | a.m. | Arrival at Arrabeh village |
| 9:30 - 10:00 | a.m. | Demonstration on control of Almond Insect - (Plant Protection Section and R.D.D. cooperating). |
| 10:00 - 10:30 | a.m. | Control of Anthrax and Newcastle - (Veterinary Department and R.D.D. cooperating). |
| 10:30 - 11:00 | a.m. | Refreshments |

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| 11:00 - 1:00 | p.m. | Home Economics Extension Activities: |
| | | 1. Home Demonstration Club. Demonstration by Home Agent - Food Preparation |
| | | 2. Sadeek Club (Youth Work). |
| 1:00 | p.m. | Leave for Nablus - (Lunch). |

Bus 2
Zaita Village

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|---|---|---|
| 7:00 | a.m. | Leave Hotel for Nablus District |
| 9:45 - 10:45 | a.m. | Zaita Village: |
| | | 1. Visit Poultry Project. |
| | | 2. Culling Demonstration by Extension Agent with poultry farmers. |
| 10:45 - 11:10 | a.m. | Refreshments |
| 11:10 - 12:45 | p.m. | Home Economics Extension Activities: |
| | | 1. Home Demonstration Club. Demonstration by Home Agent - Food Preparation. |
| | | 2. Sadeek Club Meeting (Youth) |
| 12:45 | p.m. | Leave for Nablus - (Lunch). |

Bus 3
Qalqilia Village

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|---|---|---|
| 7:00 | a.m. | Leave Hotel for Nablus District. |
| 9:30 - 11:00 | a.m. | Qalqilia Village: |
| | | 1. Demonstration - Early Blight Control - potatoes. (Plant Protection and R.D.D. cooperating). |
| | | 2. Grafting - Result demonstration. |
| | | 3. Adapting - Inarching as a new practice. |
| | | 4. Boys Sadeek Club - Budding demonstration. |
| 11:00 - 11:30 | a.m. | Refreshments served by Mr. Walid Sabe' Home, (Extention Agent). |
| 11:30 - 1:00 | p.m. | Home Economics Extension Activities: |

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|---|---|---|
| | | 1. Home Demonstration Club Meeting -(Maternal and Child Care). |
| | | 2. Sadeek Club Meeting (Youth). |
| 1:00 - | p.m. | Leave for Nablus - (Lunch). |
| Friday, March 23 | | |
| | | Holiday - (Tours etc. arranged for sight seeing). |
| Saturday, March 24 | | |
| | | Chairman - Mr. N. Y. Varma, India |
| 9:00 - 9:45 | a.m. | "The Function of Administration and Supervision in Agricultural Extension." By Mr. Mohammad Huneidi, Assistant to the Director, Rural Development Department, Jordan. |
| 9:45 - 10:45 | a.m. | Discussion groups. |
| 10:45 - 11:00 | a.m. | Recess. |
| 11:00 - 12:30 | p.m. | Discussion groups. |
| 12:30 - 2:30 | p.m. | Lunch. |
| | | Chairman - Mr. Wajeh Maalouf, Lebanon |
| 2:30 - 3:30 | p.m. | Discussion groups. |
| 3:30 - 4:45 | p.m. | Recess. |
| 3:45 - 5:15 | p.m. | General session for presenting group reports. |
| Sunday, March 25 | | |
| | | Field trip. |
| 7:00 | a.m. | Leave Hotel |
| 10:15 | a.m. | Arrival at North Shuneh. |
| 10:15 - 12:15 | p.m. | East Ghor Project - (Agricultural Agent in-service training - new farm projects). |
| 12:15 - 2:00 | p.m. | Leaving Canal and arriving at Wadi Far'a Station |
| 2:00 - 3:00 | p.m. | Lunch. |

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| 3:00 - 4:00 | p.m. | Visiting - Experimental projects (Banana, citrus and tomato). |
| 4:00 - | p.m. | Leave for Jerusalem |

Monday, March 26

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| | | Chairman - Mr. Ahmad Elgin, Turkey |
| 9:00 - 9:45 | a.m. | Program Planning: "Do We Plan With or For People?" by Mr. Wajeh Maalouf, Chief, Agricultural Extension Service, Lebanon. |
| 9:45 - 10:30 | a.m. | "Program and Planning", by Mr. Rameshwar B. Singh, Agriculture Extension Officer. |
| 10:30 - 10:45 | a.m. | Recess. |
| 10:45 - 12:30 | p.m. | Discussion groups. |
| 12:30 - 2:30 | p.m. | Lunch. |
| | | Chairman - Mr. Rana, Nepal |
| 2:30 - 3:30 | p.m. | Discussion groups. |
| 3:30 - 3:45 | p.m. | Recess. |
| 3:45 - 5:15 | p.m. | General session for presenting group reports. |

Tuesday, March 27,

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| | | Chairman - Dr. Abdul Aziz Khan, Pakistan |
| 9:00 - 9:45 | a.m. | "The Effective Communication Process." By M. G. Kamath, India, Director of Agricultural Information. |
| 9:45 - 10:45 | a.m. | Discussion groups. |
| 10:45 - 11:00 | a.m. | Recess. |
| 11:00 - 12:30 | p.m. | Discussion groups. |
| 12:30 - 2:30 | p.m. | Lunch. |
| | | Chairman - Mrs. Suheyla Teoman, Turkey |
| 2:30 - 3:30 | p.m. | Discussion groups. |
| 3:30 - 3:45 | p.m. | Recess. |
| 3:45 - 5:15 | p.m. | General session for presenting group reports. |

Wednesday, March 28

Delegates traveled to Amman for an audience with His Majesty, King Hussein.

Thursday, March 29

Field trip.

"Community Type Projects."

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| 7:00 | a.m. | Leave hotel for Beit Hanina Center. |
| 7:15 | a.m. | Visiting "Our Happy Home." |
| 8:00 | a.m. | Leave Center for Hebron District. |
| 10:00 - 11:30 | a.m. | Arrive at Sammou' Village to see a village road being built. |
| 11:30 - 12:30 | p.m. | Arroub - Experimental Station. |
| 12:30 - 2:00 | p.m. | Lunch. |
| 2:00 - 3:00 | p.m. | Visit Experimental Station. |
| 3:15 | p.m. | Leave for Jerusalem |

Friday, March 30

Tours etc. arranged for sight seeing.

Saturday, March 31

Chairman - Mr. Khalid Haj Hassan, Jordan

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| 8:00 - 9:00 | a.m. | General Session. |
| | | Report of Resolutions Committee - Miss Aida Zahran, Jordan. |
| | | Summary Report of Seminar Evaluation - Mr. R. W. Shoffner, Seminar Coordinator. |
| 9:00 | a.m. | Adjournment. |